NAVAL POSTGRADUATE SCHOOL
Monterey, California

THESIS

A STUDY OF THE ARMY'S WORD PROCESSING PROGRAM
WITH CASES

by

John M. Hardesty

June 1980

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tion and the Word Processing literature. In addition, two
teaching cases were developed which deal with Word Processing/
Administrative Support problems.

A Study of the Army's Word Processing Program
With Cases

by

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ABSTRACT

The purpose of this study is to demonstrate potential advantages and disadvantages that could result from the implementation of a Word Processing/Administrative Support System. A model is presented on planning, implementing, and maintaining a Word Processing/Administrative Support System. A comparison is made of the guidance contained in AR 340-8 and the guidance contained in the current Word Processing literature as pertains to the activities presented in the model. Recommendations are made for improving AR 340-8 based on an analysis of the material presented in the regulation and the Word Processing literature. In addition, two teaching cases were developed which deal with Word Processing/Administrative Support problems.

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I. INTRODUCTION

The cost of written communications has increased more rapidly than the productivity of the typist [Smith, 1979]. Law and Pereira [1976] reported that the cost of the typed page rose 40% from 1971 to 1974 while the productivity of the typist has increased minimally since World War II. Trends have been reported which have impacted either directly or indirectly on the cost of word processing (WP) and administrative support (AS) services in private and public institutions:

- A secretary spends 18.4% of the time waiting for work [Petrovich, 1978].
- Only 56.9% of the duties performed by secretaries were for tasks for which they were hired [Petrovich, 1978].
- In a sample taken by Law and Pereira [1976], only 3% of all documents were longer than 50 pages but they constituted 58% of the workload.
- In 1975, administrative costs constituted 40% to 50% of total company costs, an increase from 20% to 30% reported a decade earlier ["The Office of the Future," 1975].
- Labor costs in the nonmanufacturing sector have been rising at twice the rate experienced in the typical factory [Law and Pereira, 1976].

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- Law and Pereira [1976] estimated that seven out of
  ten workers will be in service related jobs by 1980.

Lack of investment in capital equipment for WP/AS func-
tions has been cited as a causative factor for many of these
trends. Investment in capital equipment per office worker
was reported at $2,000 annually, while $25,000 was spent for
each manufacturing employee during the same period. However,
the acquisition of capital equipment for some of the WP/AS
functions has started to increase because of competition in
the WP market and technological advancements have driven
down the cost of WP/AS equipment ["The Office of the Future,"
1975].

A. DEFINING WORD PROCESSING AND ADMINISTRATIVE SUPPORT

For the purpose of this study, the definitions of WP and
AS provided by the Army [DA, 1979] will be used. Word
Processing is defined as a system that covers the activities
involved in typing, transcribing, proofreading, editing, and
performing other related tasks. Administrative Support
is defined as a system that covers the activities involved
in filing, copying, duplicating, and distributing written
communications; handling telephone inquiries; and performing
other secretarial functions in support of a principal. A
principal is defined as a person who can influence or direct
the tasks performed by WP/AS personnel.

Thomas [1975] reported that the integrated approach
developed by the government laid the groundwork for viewing

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WP/AS as a system. The federal government views WP/AS as the efficient and effective production of WP/AS services at the lowest possible cost through the combined use of systems management procedures, automated technology, and accomplished personnel [Thomas, 1975].

B. POTENTIAL ADVANTAGES OF WP/AS SYSTEMS

As technology advances, improvements in the means by which tasks are performed are often realized [Webber, 1979]. This has been the case with the recent advancements made in WP/AS equipment. Wohl [1977] reported that with the introduction of IBM's Magnetic Tape Selectric Typewriter (MT/ST) in 1964, the traditional method for performing WP/AS functions began to be questioned. He stated that the trend to review traditional WP/AS procedures has continued because of industry desire to reduce costs and the equipment makers' marketing efforts.

A review of the current literature revealed that organizations in both the private [Burns, 1979] and public sectors [Thomas, 1975] have realized advantages from the implementation of WP/AS systems. The most common criteria used for determining advantages resulting from system implementation are reduced costs, increased services and flexibility, increased career opportunities, and other intangible benefits [Malone, 1976].

Increases in productivity that resulted from centralization and/or improved WP/AS equipment have been reported as a significant factor in reducing WP/AS costs [Primrose, 1975].

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Research conducted by Law and Pereira [1976] reported that a secretary only produced ten typed words per minute on the average when errors, telephone interruptions, and other disruptions were taken into account. However, in WP/AS Centers operating in the same environment, 30 words per minute were produced. Other reports of increased productivity and reduced operating costs that resulted from the use of WP/AS systems were reported by Smith [1979], Straham [1976], and Adams [1978].

Burns [1979] predicted technological trends which will result in additional increases in productivity. He reported that an 8K processor capable of performing text editing would drop from $200 to $50 in price over the next ten years. By 1986 a typewriter could be equipped with 256K memory for less than $100. He predicted that mainframe computer systems will begin to manage correspondence and other text files in addition to their data processing chores, thereby reducing paper costs even further.

Burns (1979] reported that as organizations grow more complex, there is a greater need for more responsive administrative support. Carls [1978] reported that large scale on-line WP/AS systems were developed to meet this need by accessing other subsystems, supporting concurrent users and accommodating growth, processing large documents more easily, providing access to a large volume of documents, and making massive or frequent changes easier to accomplish. Schanstra

[1979] argues that the more flexible the system, the more economical it is in terms of corporate investment.

Smith [1975] reported that, potentially, one of the greatest impacts of introducing a WP/AS system is the development of a hierarchical structure through which a secretary can advance. He stated that many WP/AS systems were developed with this structure in hope of increasing career inducements. Instead of advancement being directly related to a principal's professional growth, there is now potential for promotion of the WP/AS staff to jobs of increased responsibility such as WP/AS Center Manager [Smith, 1975].

Burns [1979], Kreighbaum [1975], Oman [1977], Sweet [1975], and Williams [1977] have reported other benefits that were attributed to the implementation of WP/AS systems. Sweet [1975] reported that new WP/AS equipment has helped the poor typist because of the equipment's revision features. This is a significant feature considering the reported increased need for erasure-free correspondence [Kreighbaum, 1975]. Burns [1979] reported that WP/AS systems reduce the time required to assemble information or files. Other reported benefits were the reduction of the routine aspect of retyping and time spent by professional personnel in proofing successive drafts of a document [Oman, 1977; Williams, 1977].

C. MAJOR REASONS FOR WP/AS SYSTEM FAILURE

Although institutions have realized reduced WP/AS costs, increased WP/AS services and flexibility, increased WP/AS

career opportunities, and other intangible benefits which resulted from a newly implemented WP/AS system; other institutions have failed to realize such benefits. Malone [1976] reported that WP/AS systems resulted in increased costs, reduced productivity, and management and employee dissatisfaction which resulted in abandonment of newly implemented systems.

Five major reasons for WP/AS systems not realizing their full range of possible benefits are found in the literature: lack of top management support, improper planning or equipment selection, lack of adequate training and personnel selection, failure to recognize human needs, and failure to develop control systems.

1. Lack of Top Management Support

Malone [1976] reported that most WP/AS experts agree that lack of top management support is the most common reason for a WP/AS system failure. The most common explanation given for this lack of support was that many principals viewed their secretary as a symbolic reward for having climbed the corporate ladder [Gottheimer, 1978]. He stated that without this support WP/AS systems are more likely to fail.

2. Improper Planning or Equipment Selection

Burns [1979], Malone [1976], and Law and Pereira [1976] have identified improper planning or equipment selection as reasons for WP/AS system failure. WP/AS planners have stated that the task of planning for a WP/AS system is more difficult than it was in the early days of the computer revolution ["The

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Office of the Future," 1975]. Burns [1979] and Malone [1976]
stated that planning for the equipment asepcts of the system
is often everemphasized while personnel considerations are fre-
quently overlooked. Law and Pereira [1976] reported that
failures resulted from purchasing the wrong or too much equip-
ment. They attributed over-reliance on the vendor in deter-
mining equipment requirements as the source of the problem. They
warn of vendors pushing for equipment sales, not viable systems.
Smith [1979] reported that large, bureaucratic, unresponsive
WP/AS systems were created because of over-reliance on the
vendor for implementation planning and equipment selection.

3. Lack of Adequate Training and Personnel Selection

Wohl [1977] reported that even if the best hardware was
selected, systems failed because mananagement did not simul-
taneously hire and train qualified people. However, Christensen
[1977] concluded that there is a lack of qualified WP/AS per-
sonnel because many colleges and universities do not recognize
the need for WP/AS management and skill courses. In addition,
Burns [1976] warns of increased costs because of failure to
train principals in new WP/AS techniques. He reported that
dictated letters have a marked tendency to be longer and less
efficient than handwritten versions and because of revisions,
they sometimes cost more to produce.

4. Failure to Recognize Human Needs

Failure to recognize human needs by designing systems
around equipment, not people, has resulted in system failures.
Arnstein [1977] reported a case where the WP/AS Center personnel

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were kept apart from the rest of the office community.
Problems developed from too much regimentation and no direct
involvement with principals. The result was an atmosphere
which prompted numerous employee complaints which caused
management to revert back to the former WP/AS system [Arnstein,
1977]. Smith [1975] stated that a system that had been in
operation for more than three years failed because management
couldn't continue to motivate the secretaries. Failures were
also reported because management did not add variety to job
tasks. Christensen [1977] states that some WP/AS experts
recommend no more than four hours at a time in front of a
full page Cathode Ray Tube (CRT). He reports that reduced
eyesight has been attributed to prolonged use of the CRT.

    5. Failure to Develop Control Systems

        Malone [1976] reported that failure to develop sys-
tems to measure and control productivity, quality, and turn-
around time has caused system failures. He reported that
even if care was taken to develop a measurement system, if
the system is not monitoried failure can result. Other reports
indicated that if the evaluation system uncovered ineffi-
ciencies, there was a tendency to blame the equipment even
if the problem was the people or the office organization
[Malone, 1976]. In addition, Phillips [1978] warned that
productivity should be closely monitored because the same
nontyping tasks that once required six hours to perform can
be extended to eight if not checked.

D. SUMMARY

There are several advantages that can be realized from the intelligent use of WP/AS equipment. However, without a sound evaluation process for WP/AS system acquisition and management these advantages may not be realized.

E. PURPOSE OF THE STUDY

The Army has recognized the need for an evaluation criteria for WP/AS system acquisition and management and in July, 1977 published AR 340-8, the Army Word Processing Program. Prior to that time, Army users of WP/AS equipment did not receive guidance through official channels on how to determine equipment requirements, implement and evaluate systems, or determine the savings that could be realized through the use of WP/AS equipment. Users often relied on vendor recommendations for equipment selection and implementation procedures which resulted in few agencies recovering their investment costs [Larkin, 1979]. AR 340-8 was developed to preclude future deficiencies and provide a costing model for system proposals. Because the regulation contains an excellent cost efficiency model, it has been used by private institutions to aid in their WP/AS equipment selection ["Army Targets on WP Cost Effectiveness," 1975]. However, it may be possible to strengthen and expand AR 340-8 in the areas that pertain to preliminary activities, feasibility study procedures, implementation procedures, and system maintenance procedures which are important to the success or failure of a WP/AS system.

The purpose of this study is to investigate possible ways of strengthening the Army's WP/AS guidance. Areas to be covered in the study are: preliminary activities that need to be considered; establishment of feasibility study procedures; system implementation procedures; and system maintenance procedures.

II. WORD PROCESSING PLANNING, IMPLEMENTATION AND MAINTENANCE

In order to analyze AR 340-8, a standard of comparison is needed. Lucas [1978] presents a framework for the analysis of planning, implementing, and maintaining a data processing system. This chapter presents a model derived from Lucas' framework which is adapted for WP/AS applications. The model is broken down into the following interdependent activities: preliminary activities, feasibility study procedures, implementation procedures, and system maintenance procedures. A comparison will then be made of the guidance contained in Army Regulation (AR) 340-8 and the guidance contained in the current WP/AS literature as it pertains to these activities.

A. PRELIMINARY ACTIVITIES

The preliminary activities contained in this section are broken down into the following elements: selecting the criteria for evaluating system proposals and acquiring top management's support, charter, and participation.

1. Selecting the Criteria for Evaluating System Proposals

Doades [1979] argues that knowing the strengths and weaknesses of an organization's present WP/AS system will help management determine both the qualitative and quantitative factors to be used as criteria for evaluating WP/AS system proposals. The Army takes primarily a quantitative approach and

uses a least cost alternative for achieving a given mission with the same level of benefit as the selection criteria. Although the Army recognizes the qualitative measures, little guidance is presented on how to evaluate these factors and present them in a WP/AS system proposal.

Doades [1979] reported that while quantitative criteria need to be emphasized, it is the qualitative aspects of such factors as job satisfaction and ability to satisfy principal needs that are usually the causative factors for the success or failure of planned change in an organization.

2. Acquiring Top Management Support, Charter, and Participation

Malone [1976] reported that the success of a new WP/AS system is directly proportional to the commitment and leadership received from top management. He stated that before a survey can be adequately conducted, there has to be a charter granted by top management and a commitment to support a change in the traditional methods of performing WP/ AS tasks. The Army's WP regulation proponent, the Adjutant General Center, assumes that top management is committed to a WP/AS proposal since the request must go through the chain of command prior to proponent approval. However, no guidance is given in the regulation on how to acquire this support or what top management's role in system design, implementation, and maintenance should be.

Smith [1974] stated that it is easy to gain top management support if one can get them to accept certain basic assumptions about the traditional WP/AS functions. These assumptions were reported to be: (1) Traditional WP/AS systems are inefficient, misuse professional talents, and stifle the potential of WP/AS personnel which results in service that is not responsive to the principal's needs. (2) The traditional WP/AS system does not have a standard evaluation system which results in poor productivity. (3) Users will delay changing traditional WP/AS procedures as long as possible even if a new procedure is proven to be more efficient.

Once top management's concurrence is given to conduct the feasibility study, Traux and Strong [1976] recommended that a charter for the study group be attained. They recommended that the study group's charter be broad enough to analyze the following questions: (1) Should the WP/AS functions be centralized? (2) How do you develop adequate staffing to balance AS and WP functions? (3) What will be the effects on responsiveness and productivity if a new WP/AS system is implemented? (4) What influence will a new WP/AS system have on morale? (5) Will flexibility be lost under a new system? Traux and Strong contended that in order for a WP/AS proposal to meet the stated objectives, these questions have to be considered when a system is designed.

Once the charter is granted by top management, Gottheimer [1978] suggested that a memorandum from the top be sent to all affected line and staff personnel. He stated that the memorandum should announce the study and explain why the organization perceives it as a necessity for improving WP/AS operations. In addition, he recommended a thorough question and answer period to be conducted by a top management official and the WP/AS system project manager for the principals and users to make clear what WP/AS is all about and how it can help them.

Webber [1979] stated that top management should play an active role in reducing the resistance to change that occurs when any new procedure is being studied for possible implementation. He reported that the following sources of resistance to change impede goal attainment and progress: inertia of groups and organizations; preference for the present system; fear of loss of security, status, and power; rejection of change source; and fear of the unknown.

B. FEASIBILITY STUDY PROCEDURES

The feasibility study procedures presented in this section are broken down into the following segments: study group member selection and definition of functions, workload and attitude survey of the current system, system design and identification of costs, and study preparation and presentation to management.

1. Study Group Member Selection and Definition of Functions

Although the Army recognizes the need for a study group when considering the acquisition of a complex WP/AS system, little guidance is given concerning study group member selection and functions to be performed by the study group.

Gottheimer [1978] reported that the key to success of any WP/AS system is that it performs satisfactorily for the principals and the WP/AS staff. Because these groups determine if a system succeeds or fails, he stated that members from each group should be included on the study group. Lederer [1979] reported that most WP/AS theorists and practitioners agree that job satisfaction is the secretary's major need while convenience, responsiveness, productivity, and quality are the principal's needs. Because of these needs, he also contended that representative members from each group be included on the WP/AS study group.

Lucas [1978] takes a similar approach and recommends the formation of a steering committee consisting of users, principals, and information system specialists. The steering committee's function would be to develop hardware and software applications, establish priorities for the operation and implementation of the system, ensure that sufficient resources are set aside for making the study, and ensure that designers have considered the multiple roles of information for the different decision makers.

Cornell [1978] reported that data processing (DP) and WP/AS equipment is already difficult to tell apart at some levels. If the system being studied for possible implementation has many related DP features, Schanstra [1979], like Lucas, recommends that the DP manager be included in the study group. He states that the DP manager can aid in equipment selection, implementation, and provide training in supervisory techniques. Bierly [1977] reported that the DP manager is frequently overlooked as an information source which can be very useful in aiding in the planning, implementing and maintenance process.

2. Work Load Survey and Attitude Survey of the Current System

The Army has developed WP/AS survey forms such as the WP Typing Survey Task Data Sheet (Figure 2-1) and the WP Administrative Survey Form (Figure 2-2). These forms are designed to identify how much work is performed and what kind of jobs the WP/AS personnel perform [DA, 1979]. A typing survey (see Figure 2-1) is required for all WP/AS systems regardless of class of the system while an administrative survey (Figure 2-2) is optional.

There are three classes of systems defined by the Army. Class I systems are defined as systems or revisions to systems with proposed equipment purchase value and related costs of $100,000 or more. Class II systems have related costs between $20,000 and $100,000, and Class III systems have related costs of less than $20,000 [DA, 1979].

WORD PROCESSING TYPING SURVEY
TASK DATA SHEET

For use of this form, see AR 340 8 the proponent agency is TAGCEN

1 DATE RECEIVED	2. TYPIST

3 AUTHOR OR DOCUMENT ORIGINATOR

4. HOW WAS THE DOCUMENT ORIGINATED?

[ ] LONGHAND

[ ] SHORTHAND

[ ] MACHINE DICTATION

[ ] COMPOSED BY TYPIST

[ ] COPY TYPE *(Previously typed or printed material)*

[ ] PRE RECORDED ON MAGNETIC MEDIA

5. HOW WAS THE FINAL TYPED DOCUMENT PRODUCED?

[ ] ORIGINAL

[ ] REVISION *(Change to an original document)*

[ ] REPETITIVE *(Standard letter to different addressees)*

6. HOW LONG WAS THE FINAL TYPED DOCUMENT?

[ ] 1 3 PAGES

[ ] 4 - 15 PAGES

[ ] OVER 15 PAGES

[ ] OTHER *(Envelopes, cards labels, etc.)*

7. WHAT SPECIAL REQUIREMENTS DID THIS DOCUMENT HAVE?

[ ] STATISTICAL TYPING *(Tabular)*

[ ] CLASSIFIED INFORMATION *(Per AR 380-5)*

[ ] COMPUTER INPUT

[ ] TO BE PRINTED OR PUBLISHED

[ ] OTHER *(Specify)*

8. NUMBER OF LINES

REMARKS

Figure 2-1.   Word Processing Typing Survey Task Data Sheet
(From AR 340-8)

WORD PROCESSING ADMINISTRATIVE SURVEY	
For use of this form, see AR 340 8, the proponent agency is TAGCEN	

NAME	DATE
ACTIVITY	DUTY HOURS

Compute activities listed below in terms of estimated total time *(in minutes)* spent daily in the performance of each activity.
(NOTE - If you have reason to believe that any of the activities you perform should not be carried out by clerical personnel, indicate on the reverse side the specific activity (ies) and reason(s) supporting your belief.)

ACTIVITIES	TIME *(IN MINUTES)*
SECTION A − *(TO BE COMPLETED BY THE TYPIST)*	
1. DICTATION	
2. TYPING/TRANSCRIPTION	
3. PROOFREAD TYPED MATERIAL	
4. MACHINE COPYING	
5. ASSEMBLING & COLLATING DOCUMENTS *(To include other actions involved in preparation of outgoing correspondence)*	
6. TELEPHONE CALLS	
7. MAIL *(Open, read, distribute, etc.)*	
8. FILING/RETRIEVAL	
9. VISITORS *(Receptionist-type duties)*	
10. RECEIVING INSTRUCTIONS *(Indicate Instructors' name on reverse side.)*	
11. SCHEDULING AND RECORD KEEPING *(To include appointment calendars, itineraries, TDY, leave & attendance records, etc)*	
12. COMPOSING MATERIAL *(To include drafting routine correspondence, etc.)*	
13. INFORMATION GATHERING	
14. PREPARATION OF STATISTICAL DATA	
15. ERRANDS *(To include obtaining supplies, handcarrying paperwork, etc.)*	
16. OTHER *(To include making coffee, arranging conferences, etc. − Describe on reverse side.)*	
TOTAL	
SECTION B − *(TO BE COMPLETED BY ACTION OFFICER)*	
17. INITIAL PHONE CALLS ANSWERED *(These are calls which you answered first other personnel did not refer the caller to you Do not include intercom calls.)*	
18. VISITORS *(Those not first greeted or referred by other pers.)*	
19. MACHINE COPYING	
20. ASSEMBLING & COLLATING DOCUMENTS	
21. FILING/RETRIEVAL	
22. SCHEDULING AND RECORD KEEPING	
23. ERRANDS *(To include obtaining supplies, handcarrying paperwork, etc.)*	
24. OTHER *(Describe on reverse side.)*	
TOTAL	

Figure 2-2. Word Processing Administrative Survey Form
(From AR 340-8)

The Army recommends that the survey be conducted
for at least two weeks when workload is considered normal.
The data which resulted from the survey is then required
to be categorized by document length, method of input, type
of output, and specialized needs using a Workload Summary
Form which is presented in Figure 2-3. The information
derived from the survey is intended to be used to determine
equipment requirements, staffing requirements, and aid in
WP/AS system design [DA, 1979].

Although the Army recognizes the need for surveys,
primary emphasis is given to an analysis of the typing func-
tions which, in a survey conducted by Traux and Strong [1976],
only constituted 19.4% of the time spent in the typical
secretary's day. Phillips [1978] reported that the objective
survey should place equipment in the background and secre-
tary's and principal's needs in the foreground because in
reality, little time is spent by the secretary typing.

The Army's recommended survey procedures also fails
to take into account the principal's attitude of the current
system which Gottheimer [1978] stated was essential in de-
signing a new system. He developed a Principal Attitude
Survey Form, presented in Figure 2-4, which can be used to
determine the principal's attitude of the current system.

In addition to the types of data gathered from uti-
lization of the forms previously discussed, Schanstra [1979]

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```
                    WORKLOAD SUMMARY
          (Data Provided by Word Processing Survey)


                                           Average Weekly
 A.  Document Length Analysis                   Lines

     1 - 3 Pages                          _____

     4 - 15 Pages                         _____

     15 or More Pages                     _____
     Other (envelopes, labels,
       cards, etc.)

                               Total      _____

 B.  Work Input Analysis

     Longhand                             _____

     Shorthand                            _____

     Machine Dictation                    _____

     Composed by Typist                   _____

     Copy Type                            _____

     Pre-Recorded                         _____

                               Total      _____

 C.  Work Output Analysis

     Original Typing                      _____

     Revision Typing                      _____

     Repetitive Typing                    _____

                               Total      _____

 D.  Specific Workload Analysis
     (Not a total of above)

     Statistical Typing                   _____

     Classified Typing                    _____

     Computer Input                       _____

     Typing for Typesetting
       Printing or Publication            _____

     Other                                _____
```

Figure 2-3. Workload Summary (From AR 340-8)

ATTITUDE SURVEY FORM

Principals' Name _____   Instructions: Please rate
Department _____   the following support ser-
Date _____ Ext. _____   vices on a scale from 0 to
                                   5 where 0 is no service and
                                   5 is optimum

                                   CURRENT   REQUIRED
                                   SUPPORT   SUPPORT

1.   Telephone services--placing,
     answering calls; directory
     services.

2.   Typing services--text, sta-
     tistical, all other types.

3.   Dictation, transcription and
     stenographic services.

4.   Receptionist and other
     visitor services.

5.   Conferences, meetings, travel
     arrangements and related
     services.

6.   Mail services--incoming
     (receipt, opening, time-
     stamping, etc.) and outgoing
     (assembly, enveloping,
     stamping, pick-up, etc.).

7.   Message services--telegraph,
     TWX, facsimile, etc.

8.   Messenger/errand services--
     (deliveries, pick-ups,
     special errands, etc.).

9.   Maintenance of files, manuals,
     libraries, etc.

10. Reference or research ser-
     vices--retrieval from file
     or storage, library searches,
     etc., for documents or
     specific material.

```
┌─────────────────────────────────────────────────────────────┐
│              ATTITUDE SURVEY FORM (Cont'd)                   │
│                                                             │
│                              CURRENT    REQUIRED            │
│                              SUPPORT    SUPPORT             │
│                                                             │
│   11.   Audial visual aid services--chart                   │
│         making, photography, recording,                     │
│         projection.                                         │
│                                                             │
│   12.   Printing services, including                        │
│         photocopy, reproductions, etc.                      │
│                                                             │
└─────────────────────────────────────────────────────────────┘
```

Figure 2-4. Attitude Survey Form (From
"Developing a System Suited to Your Needs"
by D. Gottheimer, Administrative Management,
April 1978, pp. 78-87.

recommends a detailed study of those functions that lend
themselves to DP.

    3.   System Design and Identification of Costs

        This section contains a discussion of the following
areas that need to be taken into consideration when design-
ing a WP/AS system: structure of the WP/AS system, office
environmental considerations, equipment selection, identifi-
cation of staffing requirements, identification of training
requirements, and identification of start-up costs [DA, 1979;
Orneals, 1976].

        a.   Structure of the WP/AS System

        Under the Army's current procedures, the struc-
ture of the WP/AS system is to be determined by the requesting
agency. No guidance is given on the benefits or problems
that can result from a centralized or decentralized structure.
A centralized structure is defined as a WP/AS system that
requires all tasks to be performed in a central location and
a decentralized structure allows tasks to be performed in
multiple locations [Traux and Strong, 1976].

        Traux and Strong state that there are sound
economic reasons for centralization. They report that
centralization allows staffing requirements to be determined
by the average workload rather than the peak workload. Also
special typing applications such as rough drafting and repe-
titive documents are handled with greater efficiency. In

addition, Petrovich [1978] reported that the secretary's
unproductive time can be eliminated by centralization.

Although centralization has worked well in many
organizations, in other organizations centralization has
failed to meet the needs of the secretaries and principals
[Smith, 1979]. Smith [1979] reported the following alternatives
to centralization that have been proven successful when imple-
mented within the private sector: (1) WP/AS centralization
by department or functional unit, (2) WP centers are installed
to handle overflow typing, (3) The traditional WP/AS system
is retained but job machines are strategically located
throughout the organization, (4) No change to the present
system except the addition of a WP keyboard at the individual
typing station.

b. Office Environmental Consideration

Army regulation 340-8 does not give any guidance
on office environmental considerations, while studies reported
by Smith [1975] indicated that the environment of WP/AS
Centers contributed to the needs of the users and impacted
on the effectiveness of the operation. He reported that
furnishing manufacturers have designed many of the nonmachine
solutions to problems intrinsic to WP/AS Center environments
such as new work patterns, noise, wire management, and new
storage needs. Other reports have indicated that work station
furniture components use existing space in new ways which
facilitates the sharing of equipment, thereby reducing costs

["From Typing Pool to Word Processing Center," 1977]. In addition, Smith [1975] reported that creating a livable as well as a functional workplace can increase job satisfaction and cut costly staff turnover.

  c. Equipment Identification and Selection

    Although the Army separates the type of WP equipment into dictation and transcription/output categories, guidance has not been given on how to determine if a piece of equipment is efficient for a given application. Also guidance regarding other factors that may need to be considered in selecting equipment has not been given.

    (1) Dictation Equipment Selection. Lawson [1979] reported that the input system is the key to realizing cost savings of a WP/AS system. He stated that the study group should concentrate on the selection of a good user oriented dictation system. Research conducted by Traux and Strong [1976] confirms Lawson's statement by indicating that machine dictation can be about five to six times faster than long hand, and two to three times faster than dictating in-person to a secretary. In addition, machine dictation does not tie up the simultaneous time of two people. Traux and Strong [1976] reported that in addition to providing typing input, the dictation system could be used to enhance other functions such as communicating instructions and/or delegating tasks to the secretary.

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(2) Transcription and Output Equipment Selection.
Wohl [1977] reported that there are three basic categories
of WP equipment for transcription and output: stand alone
hardcopy WP equipment, stand alone display WP equipment,
and shared logic WP equipment. The stand alone hardcopy
equipment consists of an output device connected to some type
of magnetic memory and is employed for such tasks as auto-
matic typing of repetitive letters, merging of prerecorded
paragraphs, and revisions of short documents [Wohl, 1977].

The stand alone display equipment consists
of a display device (normally a CRT) married to magnetic
media and some type of letter quality printer [Wohl, 1977].
She reports that such equipment may have its text editing
and other functions hardwired or in fact, be a small computer.
She reported that this category of equipment normally uses
a combination of soft and hard functions and extensive use
is made of read/write, read-only, and programmable read-only
memory.

The shared logic WP category consists of
two types. The first category consists of a number of
terminals without memory or logic (usually printer terminals
or display terminals) sharing the capability and storage
of a central processing unit. The other type of shared
equipment is a distributed logic type where at least some of
the intelligence resides at the terminals and the sharing
that is done is basically through the use of peripherals

or jointly accessed storage [Wohl, 1977]. She states that
shared logic equipment may be used for performing WP/AS
functions that can be provided by the stand alone equipment
in addition to functions that lend themselves to automation
[Wohl, 1977].

(3) Selection Criteria. Carls [1978] developed
a simple equation to determine whether a piece of WP hard-
ware is cost justified for a given application:

$$\frac{\text{WP system fixed costs}}{\text{Manual system cost} - \text{proposed system cost}} = \frac{\text{Crossover}}{\text{Point}}$$
per page   per page

Dividing the annual cost of the WP system by savings per page
results in the number of pages per year that must be produced
before the system is cost justified.

Carls used an example to demonstrate
the calculation of the crossover point in which it was assumed
that the current typewriter was paid for and the only costs
of producing a typed page was the typist's salary. The
following time estimates per page were given for typing under
the manual system and proposed system:

PRESENT MANUAL SYSTEM

first draft	30 minutes
coordination draft	30 minutes
final copy	<u>15</u> minutes
Total time/page	75 minutes = 1.25 hours

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first draft	14	minutes
coordination draft	7.5	minutes
final copy	6	minutes
total time/page	27.5 minutes	= .46 hours

Fixed costs associated with the proposed WP/AS system were given as $1,900 per year and the secretarial salary cost per hour including fringe benefits was $9.00. The cost per manual page of $11.25 was found by multiplying the secretarial cost of $9.00 per hour by 1.25 hours. The cost per page under the proposal of $6.43 was found by multiplying the secretarial cost of $9.00 per hour by .46 hours then adding an average rental charge per page of $2.29. The crossover point was then determined:

$$\frac{\$1,900}{11.25 - 6.43} = 394 \text{ pages}$$

In this example, it is cheaper to use word processing instead of manual typing if at least 395 pages per year were produced [Carls, 1978].

As a general guide, Lederer [1979] stated that simpler machines are cost effective where few revisions are made; video display text editors are cost effective for companies with heavy editing and formatting needs; and shared

logic systems are cost effective where certain data processing functions can be integrated with WP/AS functions.

In addition to cost, Bergeizon [1975] identified other factors that must be considered in the equipment selection process. These factors were reported as standardization, reliability of equipment, hardware and software capabilities, and ease of operation.

d. Identification of Staffing Requirements

The Army's method for projecting the non-supervisory typing personnel staffing requirements is presented in the Personnel Projection Worksheet shown in Figure 2-5. Staffing requirements for the AS type functions can be determined by analyzing the results of the survey conducted using the Army's WP Administrative Survey Form (Figure 2-2).

The Army's guidance is consistent with the information contained in the WP literature. For example, Bierly [1977] reported that when determining staffing requirements, all the tasks that are performed under the present system have to be planned prior to implementing a new system. This is the same recommended procedure contained in AR 340-8. However, the Army has failed to give guidance on creating a career path for WP/AS personnel.

When developing career paths, Arnstein [1977] included separate career paths for personnel performing primarily WP functions and those who worked primarily in the AS field. However, Christensen [1977] stated that not all secretaries want to type all day and a variety of tasks adds

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```
┌─────────────────────────────────────────────────────────────────────┐
│                   Personnel Projection Worksheet                      │
│                                                                       │
│                                                                       │
│  Type of Work      Average Weekly ÷ Production   X Factor for  =  Projected │
│  Performed              Lines          Factor       Absences      Personnel │
│                                                                       │
│  Original Typing                    3500(3500)*  X  1.11        =         │
│                                                                       │
│  Revision Typing                    5000(7,000)  X  1.11        =         │
│                                                                       │
│  Repetitive Typing                  7000(10,000) X  1.11        =         │
│                                                                       │
│      *Use the factor in parenthesis when shared-logic equipment or micro │
│  processors with CRT displays and independent printers are being proposed. │
│                                                                       │
│                                                                       │
│     Total Number Word Processing Personnel Required Per Week:  _____ │
│                                                                       │
│                                                                       │
│     Personnel Projection - Total System                               │
│                                                                       │
│                                                                       │
│     (1)  Word Processing Personnel                                    │
│                                                                       │
│                                                                       │
│                  Annual                    Number           Total     │
│                  Individual                  of             Annual    │
│  Grade/Step      Salary        X         Employees    =     Salary    │
│                                                                       │
└─────────────────────────────────────────────────────────────────────┘
```

Figure 2-5. Personnel Projection Worksheet (From AR 340-8)

to job enlargement and satisfaction. Although Arnstein [1977]

reported that establishing separate career paths can prove

successful, she stated that this normally occurred as a result

of varying interests among the WP/AS Center personnel.

  e. Identification of Training Requirements

    Although the Army's guidance does not contain

recommended training areas, it can be assumed that this

requirement will be identified in a WP/AS system request
since most WP/AS hardware vendors have a standard training
package.

Christensen [1977] reported that there will be
a training period required before WP/AS personnel will be
knowledgeable and accustomed to the new equipment. He
reported that most vendors have standard training packages
that are sold with the equipment. He also reported that
supervisors should learn a little finance, economics,
accounting, administrative management, and data processing
to improve their management skills. He stated that many
more colleges have started classes in these subjects
which are less expensive than companies training their own
personnel.

f. Identification of Other Costs

Before the effectiveness and efficiency of a
proposed system can be examined, the Army's guidance states
that all costs and savings associated with a WP/AS system
must be identified. AR 340-8 provides the following check-
list to aid in the identification of these costs:

- Personnel Costs
- Equipment rental or purchase costs
- Maintenance Costs
- Supplies cost
- Furniture costs
- Installation costs

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- Consultant Fees

- Facility Modification costs

- Telephone Installation costs

- Moving expenses

However, the Army's checklist failed to include training costs and the new and old equipments salvage value.

4. <u>Study Preparation and Presentation to Management</u>

The method used by the Army to document WP/AS system proposals is contained in AR 340-8. The Army's suggested format is contained in the Word Processing System Proposal Guide shown in Figure 2-6. This guide requires, as enclosures, the Workload Summary (Figure 2-3), the Personnel Projection Worksheet (Figure 2-5), the System Costs and Savings Worksheet (Figure 2-7) and the Rent Purchase Analysis Worksheet (Figure 2-8).

As can be seen from Systems Costs and Savings Worksheet (Figure 2-7), alternatives are compared against each other by determining the present value of the life cycle costs of each proposal then computing the payback period. A maximum payback period of four years is used as a criterion for approving WP/AS system requests based on a five year economic life. As a minimum for Class I Systems, the Army requires a review of the following alternatives (see Rent Purchase Analysis Worksheet showed in Figure 2-8): present system (do nothing), proposed system purchased during

```
                    Word Processing System Proposal

    1.   Requesting agency:

    2.   Unit Identification Code:

    3.   Project Officer:

    4.   Telephone number:

    5.   Class of system:   (I, II, or III)

    6.   Narrative of present system:

    7.   Narrative of proposed system:

    8.   List of vendors contacted:

    9.   Tell why the vendors selected can best meet
         your needs:

   10.   List of special features and why each is needed:

   11.   Number of personnel space reductions that will
         result if this proposal is approved:

   12.   Note that Army security aspects have been
         considered:

   13.   Enclosures:   include Workload Summary (Figure 2-3),
         Personnel Projection Worksheet (Figure 2-5),
         System Costs and Savings Worksheet (Figure 2-7),
         and Rent-Purchase Analysis Worksheet (Figure 2-8).
```

Figure 2-6.   Word Processing System Proposal Guide
              (From AR 340-8)

SYSTEMS COSTS AND SAVINGS WORKSHEET

A. Cost of Current System

Cost Category	Annual Cost
Personnel	
Overtime	
Maintenance	
Supplies	
Equipment Rental	
Other (Specify)	
Total Cost	

B. Estimated Cost of Proposed System

Cost Category	1st Year	2nd Year	3rd Year	4th Year	5th Year
Personnel					
Automatic Typewriters					
Dictation Equipment					
Maintenance					
Supplies					
Facility Modification					
Furniture					
Rugs & Drapes					
Moving Expense					
Telephone Installation					
Consultant Fees					
Others (Specify)					
Total Cost					

```
+--------------------------------------------------------------------+
|          SYSTEMS COSTS AND SAVINGS WORKSHEET  (Cont'd)             |
|                                                                    |
| C.  Cost Analysis                                                  |
|                                                                    |
|                    1st Year   2nd Year   3rd Year   4th Year   5th Year |
|                                                                    |
|     Total Current                                                  |
|        System Costs                                                |
|                                                                    |
|     Total Proposed                                                 |
|        System Costs                                                |
|                                                                    |
|     Difference (+/-)                                               |
|                                                                    |
|     Cumulative                                                     |
|        Difference                                                  |
|                                                                    |
+--------------------------------------------------------------------+
|                                                                    |
| D.  Payback Period                                                 |
|                                                                    |
|     Show the number of years to the nearest 1/12 of a year required|
|     before the accumulated savings will pay back the investment in |
|     a WP system _____.                             |
|                                                                    |
+--------------------------------------------------------------------+
```

Figure 2-7.   System Costs and Savings Worksheet
              (From AR 340-8)

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RENT-PURCHASE ANALYSIS WORKSHEET

Option 1 - Continued rental during full economic life.
      Includes WP equipment rental charges and maintenance.

Optino 2 - Purchase during economic life. Includes rental payments
      prior to purchase, purchase price of WP equipment minus
      rental applied to purchase price, & maintenance contract
      price.

A. Procurement Analysis

Option 1

	Annual Costs	X	Discount Factor	=	Present Value of Annual Costs
1st Year		X		=	
2d Year		X		=	
3d Year		X		=	
4th Year		X		=	
5th Year		X		=	

Total Cost of Option 1 = $

Option 2

	Annual Costs	X	Discount Factor	=	Present Value of Annual Costs
1st Year		X		=	
2d Year		X		=	
3d Year		X		=	
4th Year		X		=	
5th Year		X		=	

Total Cost of Option 2 = $

B. Cost Difference Between Options: (Option 1 minus Option 2)

        $ _____

C. Recommended Procurement Plan: (Explain what option is recommended,
      why, and what point(s) in time that option(s) should be
      exercised.)

Figure 2-8. Rent-Purchase Analysis Worksheet
(From AR 340-8)

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economic life, and proposed system with continuous rental during full economic life [DA, 1979].

DOD Instruction 7041.3, "Economic Analysis and Program Evaluation for Resource Management," offers an alternative method for presenting investment proposals. The DoD guide entitled "Systematic Method for Structuring Analysis" is shown in Figure 2-9. This guide varies from the Army's guide in that it allows for a discussion of the effectiveness of the proposed system and a discussion of the non-quantifiable factors.

```
A SYSTEMATIC METHOD FOR STRUCTURING ANALYSIS

1.  Complete definition of the problem as viewed by the
    analyst.
2.  Statement of objectives of the analysis with an
    explanation of the relationship of the objectives
    to the overall problem.
3.  Description of all alternatives analyzed.
4.  Criterion selected for ranking alternatives and
    reasons for the selection.
5.  Effectiveness analysis including measures, data,
    and estimating procedures.
6.  Cost analysis including measures, data, and estimating
    procedures.
7.  Evaluation of alternatives complete with all points
    relevant to the decision.
         a.  Discussion of quantifiable factors.
         b.  Discussion of non-quantifiable factors.
8.  Recommendations derived from the analysis.
```

Figure 2-9. Systematic Method for Structuring Analysis
(From DOD Instruction 7041.3)

C. IMPLEMENTATION PROCEDURES

The purpose of this section is to review the Army's guidance on implementation procedures and compare it to the guidance contained in the current WP/AS literature.

Although AR 340-8 places the responsibility of system implementation functions on the requesting activity, the only guidance contained in AR 340-8 pertains to developing word standards.

Smith [1975] states that the implementation schedule should contain a calendar of events with identification of a responsible group or person for each event. He stated that the schedule should contain a pre-install phase and an implementation phase. The pre-install phase should consist of developing standards, modifying facilities, preparing manuals, conducting training seminars, selecting WP/AS personnel, conducting orientations, ordering needed supplies, and rearranging telephones. The implementation phase involves the actual start-up of the new WP/AS procedures.

1. Pre-Install Phase

AR 340-8 contains the following forms which can be used to establish standards and determine the performance of a WP/AS Center: Input Volume (Figure 2-10) for determining total line input, Output Volume (Figure 2-11) for determining total line output, Miscellaneous Output (Figure 2-12) for determining output such as labels and fill-in forms,

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```
                        Input Volume (Lines)

                              Volume

Categories      1st Mo   2nd Mo   3rd Mo   4th Mo   5th Mo   6th Mo   Total

Machine
Dictation

Handwritten

Copy Type
(25% or less
handwritten)

Pre-recorded¹


    ¹Material previously recorded by automatic typewriter.
```

Figure 2-10.   Input Volume Worksheet
               (From AR 340-8)

```
                       Output Volume (Lines)

                              Volume

Categories      1st Mo   2nd Mo   3rd Mo   4th Mo   5th Mo   6th Mo   Total

1-3 Pages

4-15 Pages

More than 15
  Pages
```

Figure 2-11.   Output Volume Worksheet
               (From AR 340-8)

```
┌──────────────────────────────────────────────────────────────┐
│                     Miscellaneous Output                       │
│                                                                │
│Categories    1st Mo   2nd Mo   3rd Mo   4th Mo   5th Mo   6th Mo   Total│
│                                                                │
│Fill in                                                         │
│Material                                                        │
│ (Forms)                                                        │
│                                                                │
│                                                                │
│Other                                                           │
│(Labels,                                                        │
│Envelopes,                                                      │
│etc.)                                                           │
│                                                                │
└──────────────────────────────────────────────────────────────┘
```

Figure 2-12.   Miscellaneous Output Worksheet
(From AR 340-8)

Quality Control (Figure 2-13) for determining number of

errors, and User Information (Figure 2-14) for determining

the number of WP/AS system users.

```
┌──────────────────────────────────────────────────────────────┐
│                      Quality Control                           │
│                    (number of errors)                          │
│                                                                │
│                         Volume                                 │
│                                                                │
│Categories    1st Mo   2nd Mo   3rd Mo   4th Mo   5th Mo   6th Mo   Total│
│                                                                │
│Centers                                                         │
│Errors per                                                      │
│1,000 Lines                                                     │
│                                                                │
└──────────────────────────────────────────────────────────────┘
```

Figure 2-13.   Quality Control Worksheet
(From AR 340-8)

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```
┌─────────────────────────────────────────────────────────────────┐
│                      User Information                             │
│                                                                   │
│                          Volume                                   │
│                                                                   │
│ Categories    1st Mo   2nd Mo   3rd Mo   4th Mo   5th Mo   6th Mo   Total │
│                                                                   │
│ Total                                                             │
│ Potential                                                         │
│ Users                                                             │
│                                                                   │
│ Total                                                             │
│ Actual                                                            │
│ Users                                                             │
│                                                                   │
└─────────────────────────────────────────────────────────────────┘
```

Figure 2-14.   User Information Worksheet
                (From AR 340-8)

Although the Army relies heavily on line counts as
a measure of productivity, Christensen [1977] states that
line counts have been overused. He cites an example where
the type of work performed each month varied greatly which
resulted in misleading results when the line-count standards
were applied. What he recommended was defining standards
for the various types of WP/AS tasks performed within the
WP/AS Center by personnel who have knowledge of work measure-
ment techniques and the type of work involved.

Other elements of the pre-install phase which are
presented are factors that need to be considered when
selecting the WP/AS Center's supervisor and items that need
to be included in the WP/AS Center manual.

Caplinger [1974] stated that a basic item necessary
for a WP/AS system to succeed is the selection of a qualified

supervisor. She states that the supervisor should be able
to maintain high morale, productivity, and be able to train
personnel to handle the varied type of work within the center.

Gottheimer [1978] reported that the following items
should be included in a WP/AS Center manual:

"   - Purpose of the center

    - Hours of operation

    - How to handle questions

    - Priorities for handling the work

    - Storage systems

    - Sample formats with margins, tabs, and pitch

    - Proofreading methods

    - Proof reader's marks

    - Grammar and punctuation guidelines"

2.   Implementation Phase

Although the Army leaves the method of implementation
up to each requesting agency, Gottheimer [1978] states that
it is best to implement a WP/AS system slowly. He states
that the WP/AS Center manager should constantly monitor the
Center's performance and the principals and WP/AS equipment
operator's reactions to thenew system. He states that gradual
implementation allows the WP/AS system manager to work out
any problems in the system before other sections or elements
within an organization convert to the new system. In addi-
tion, Caplinger [1976] suggests immediate reduction of the
secretarial staff and equipment that results from the

implementation of the new system. If the reduction is not accomplished principals will revert to their old methods. She stated that reverting to the old methods will undermine the effectiveness of the newly implemented system.

D. SYSTEM MAINTENANCE

The purpose of this section is to review recommended WP/AS system maintenance procedures contained in the current literature. AR 340-8 does not contain any recommended procedures.

Doades [1976] stated that one may want to use the same tools in systems follow-up as were used in the study portion. For example, she stated that if you surveyed the staff for their perceptions of the previous system then the same survey may be given to evaluate the new system. She states that by comparing answers given after the WP/AS system is implemented with the answers given before the WP/AS system was implemented it should help determine the systems success and identify problem areas.

Smith [1975] reports that systems maintenance should encompass operational and problem area checks, a review of the system in terms of productivity and efficiency, and con- tinuous verification of the procedures manual.

Arnstein [1977] states that WP/AS is more than doing a survey, putting in equipment and letting the systems run. She contends that it is a continuing program of checking

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and researching new equipment and procedures that will meet
the requirements of the user.

E.   SUMMARY

This chapter introduced a model for planning, implementing
and maintaining a WP/AS system. A comparison was then made
of the Army's guidance and the guidance contained in the
current WP/AS literature as it pertains to the activities
presented in the model. Chapter Three will present an
algorithm for planning, implementing, and maintaining a
WP/AS system based on an analysis of the material contained
in this chapter.

III.   RECOMMENDATIONS AND CONCLUSIONS

The purpose of this chapter is to make recommendations concerning the Army's procedures pertaining to WP/AS system planning, implementation, and maintenance; review the constraints contained in this study; and present implications for additional research.

A.   RECOMMENDED PROCEDURES FOR PLANNING, IMPLEMENTING, AND MAINTAINING A WP/AS SYSTEM

This section provides recommendations for planning, implementing, and maintaining a WP/AS system based on an analysis of the procedures contained in AR 340-8 and the procedures contained in the current WP literature.   It should be noted, however, that all of the recommended procedures contained in this chapter only apply when it can be determined that the level of effort required by following these procedures would be worth the benefits to be gained [DoD, 1972].   As a general rule, all of the recommendations contained in this chapter apply to Class I systems as defined in Chapter II.

1.   Selecting the Criteria for Evaluating System Proposals

The Army's [DA, 1979] least cost criteria for providing WP/AS services and Doades' [1979] qualitative criteria of ability to satisfy the principals needs and the ability to provide user satisfaction while holding service levels constant are recommended.   Using these criteria considers

the needs of top management, the principals, and the users.
The consideration of the needs should result in a success-
ful WP/AS system.   Holding service levels constant is recommended
because it aids in the analysis by allowing the study group
to evaluate alternatives according to multiple criteria from
a common base.

    2.   Acquiring Top Management Support, Charter, and
        Participation

       The Army's guidance concerning the role of top
management in planning, implementing, and maintaining a
WP/AS system can be strengthened if expanded to include how
the study group can go about receiving top management's
support, what the study group's charter should include, and
defining top management's responsibilities in reducing the
resistance to change.   As pointed out by Malone [1976],
without top management support a new WP/AS system will more
than likely fail.   For this reason, the procedures of Smith
[1979], Traux and Strong [1976], and Gottheimer [1978] pre-
sented in Chapter II are recommended.

       A suggested management memorandum for Army use, as
recommended by Gottheimer [1978], is contained in Appendix
A.   Four major goals of the suggested memorandum are:
(1) To state why the WP/AS feasibility study is necessary,
thereby reducing preference for the present system, (2) To
help reduce the group inertia problem by placing affected
WP/AS personnel on the study group, (3) To help reduce
fear of the unknown by involving principals and users,

(4) To show that actions are being taken to minimize per-
sonnel turnover, thereby reducing the fear of loss of
security.

3. Study Group Member Selection and Definition of
    Functions

The Army's guidance concerning study group member
selection and definition of functions could be strengthened.
A recommended method of strengthening the guidance would be
to include the selection of principals and users on the study
group and a DP expert where appropriate. As was discussed
by Gottheimer [1978] and Cornell [1978], a WP/AS system
designed by principals and users with technical expertise
provided by a DP expert stands a much better chance of being
successful than a system designed by a single person. In
addition, functions of the study group should be clearly
defined. The procedures described by Lucas [1978] and pre-
sented in Chapter II serve as an excellent guide in defining
these functions.

4. Work Load Survey and Attitude Survey of the
    Current System

The Army's surveying requirements could be improved
if expanded to require, rather than recommend, an AS survey
for Class I systems and require an attitude survey of the
principals. Although AR 340-8 provides execllent forms (see
Figure 2-1 through Figure 2-3) for use in determining equipment
and staffing requirements, it does not give guidance on how
to determine user and principals needs. Gottheimer's [1978]

Attitude Survey Form (see Figure 2-4) is recommended because
it can be used to gather the principals stated attitudes
which then can be taken into account when designing a system.
As Gottheimer [1978] pointed out, input from principals is
essential in designing a new system.

5.   System Design and Identification of Costs

The purpose of this section is to provide specific
recommendations pertaining to selecting the proper: WP/AS
system structure, WP/AS system environment, WP/AS equipment,
WP/AS staffing, and WP/AS training. In addition, a guide
to identification of all other WP/AS system start-up costs
will be provided.

a.   WP/AS System Structure Requirements

The following question needs to be answered before
a propoer structure for a WP/AS system can be identified -
If the structure is centralized, can the needs of user and
principal still be met? This question needs to be contained
in AR 340-8 because all of the advantages that can be realized
from centralization may not be, if the system does not provide
for the needs of the principal and user. In addition, the
alternatives to centralization discussed by Smith [1979]
should be contained in AR 340-8 so that potential regulation
users will have some alternatives to draw upon.

b.   WP/AS System Environment

Guidance should be provided in AR 340-8 concerning
the environmental factors that need to be considered when

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designing a WP/AS system. If environmental factors are not considered in a proposal, then the user morale problems and increased costs discussed by Smith [1975] could occur.

c. WP/AS Equipment Selection

The Army's guidance concerning equipment selection could be strengthened: if guidance were provided on how to determine if a piece of equipment is efficient for a given application and if other factors that needed to be considered in selecting equipment were identified.

Carl's [1978] crossover point equation that was discussed in Chapter II is recommended as a guide in determining if a piece of WP hardware is cost justified for a given application. Although Carl's equation has limited applications to large scale shared logic systems where terminals are shared along with a CPU, it can be used successfully where clear-cut WP/AS applications can be measured. In the latter case, an aggregate cost-benefit analysis should be conducted. In addition, it would be useful if Lederer's [1979] guide to equipment selection were included in AR 340-8. This would allow the study group to narrow down the type of equipment to be considered for a given application.

The additional factors of standardization, reliability of equipment, hardware and software capabilities, and ease of operation discussed by Bergeizon [1975] and presented in Chapter II should be required as part of the analysis in the system request so that these factors are not overlooked in the selection process.

d. WP/AS Staffing Requirements

The Army provides excellent guidance concerning the identification of WP/AS staffing requirements which is consistent with the recommendations contained throughout the WP literature. For this reason, no changes are recommended in the method of determining staffing requirements.

Although AR 340-8 does not provide guidance on how to create a career path structure, each field activity has the option of creating a structure designed to fit its own needs best. In this respect, it can be concluded from the discussion in Chapter II of the work by Arnstein [1977] and Christensen [1977] that the career path structure should be a function of the desires and needs of the users.

e. WP/AS Training Requirements

Although the Army recognizes the need for training requirements, AR 340-8 could be improved if guidance were provided on the areas where lack of adequate training has caused system failure. These areas, as reported by Christensen [1977], include training of both users and principals in new WP/AS techniques and a continuing education program for the WP/AS Center Manager. In addition, TAGCEN should review each WP/AS system request to insure that adequate training is provided.

f. Identification of Other Costs

As stated in Chapter II, all costs associated with a system proposal must be identified before the

effectiveness and efficiency of a proposed system can be examined. The Army has developed an excellent checklist which will be complete with the addition of training costs and salvage values.

6. Study Preparation and Presentation to Management

It is recommended that the procedure contained in the Systematic Method For Structuring Analysis Form (see Figure 2-9) be used for the study preparation and presentation to management rather than the Army's current method. This method is recommended because it is a standard format which can be easily incorporated into AR 340-8. In addition, this procedure allows for a criteria for evaluating how the WP/AS system proposal can contribute to enhancement of job satisfaction and how the system meets the principals needs. Specific items and rationale behind the selection of the items to be included in each section of Systematic Method for Structuring Analysis are presented in Appendix B.

7. Implementation Procedures

The Army's procedures pertaining to implementation could be enhanced if expanded to include other areas besides means by which to develop standards. The implementation procedures should be broken down into a pre-install phase and implementation phase as recommended by Smith [1975] and discussed in Chapter II.

a. Pre-Install Phase

    The Army's procedures pertaining to developing
standards which were discussed in Chapter II are recommended.
The Army's procedures of gathering data (see Figures 2-10
through 2-14) from which realistic standards can be developed
is consistent with the recommendations contained throughout
the WP literature. Other pre-install phase areas that
need to be covered in the regulation of modifying facilities,
preparing manuals, conducting orientations, ordering needed
supplies, and rearranging telephones. The specific proce-
dures recommended by Caplinger [1974] and Gottheimer [1978]
and presented in Chapter II are recommended for the reasons
stated.

b. Installation Phase

    Although the Army does not recommend any method
for implementing a WP/AS system, guidance pertaining to
implementing a system slowly as recommended by Gottheimer
[1978] should be included in AR 340-8 for the reasons given
in Chapter II.

8. System Maintenance

    AR 340-8 could be improved by including system
maintenance procedures. This author recommends the modifi-
cation of the WP/AS Alternatives Rating Forms (see Figures
B-1 and B-2) to reflect only the newly implemented system.
This is recommended so that before and after results can
be compared as recommended by Doades [1976] and presented

in Chapter II. In addition, the maintenance procedures
recommended by Smith [1975] and presented in Chapter II
should be included as a guide in AR 340-8.

9. Summary

The preceeding section contained recommendations for
expanding the guidance included in Ar 340-8 pertaining to
planning, implementing, and maintaining a WP/AS system.
Recommendations were also made for proposal preparation in
accordance with the Systematic Method for Structuring
Analysis (see Appendix B). In addition, Fort Saxon's
Separation Transfer Section Case (Appendix C) was developed
to aid students in determining alternative methods of per-
forming WP/AS tasks. Fort Saxon's Word Processing System
Request Case (Appendix D) was developed for student use
in evaluating the effectiveness and efficiency aspects of
a WP/AS system.

B. STUDY CONSTRAINTS

The recommendations for planning, implementing, and
maintaining a WP/AS system contained in Chapter II have been
proven successful in the private and public sectors. However,
the author introduced WP/AS Alternative Rating Forms for
Principals and Users (see Figures B-1 and B-2) and recommended
modification of these forms for systems maintenance where no
field testing was conducted to determine the effectiveness
of these forms. Even though the survey's instructions and

questions (many of which were taken from Gottheimer [1978])
were carefully analyzed and reviewed; the forms should be
field tested prior to incorporation into AR 340-8.

Another constraint contained in this study is deter-
mining what recommended planning, implementation, and
maintenance procedures can or should be applied to Class II
and Class III systems as defined by the Army [DA, 1979].
Although it was stated that, in general, the procedures
contained in this chapter apply to Class I systems; field
testing of these recommendations could result in additional
refinements for improving AR 340-8.

C. IMPLICATIONS FOR ADDITIONAL RESEARCH

Because of the rapid technological advancements that are
being realized in WP equipment that incorporates the use of
microcomputers, the number of applications for Army use is
almost unlimited. By simply examining Fort Saxon's WP
System Request Case presented in Appendix D, one could spend
a considerable amount of time defining other personnel
functions which lend themselves to automation, electronic
mail services, and electronic files management. Because of
the Army's interest in furthering the automation of personnel
functions, additional research is recommended in these areas.

APPENDIX A

SAMPLE TOP MANAGEMENT MEMORANDUM

Subject: Word Processing Feasibility Study

MEMORANDUM FOR: All Section Chiefs, Secretaries, and
                Support Personnel

I have recently designated CW3 Mike Sweedon as Project
Manager of the Adjutant General Division, Word Processing
Study. The purpose of this study is to review current Word
Processing/Administrative Support procedures and to make
recommendations on how these systems may be improved. In
order for any recommendations to be approved, they must as a
minimum: (1) reduce costs, (2) provide an atmosphere con-
ducive to increasing career development and job satisfaction
for secretarial/administrative support personnel. I estab-
lished these goals because I am committed to them both.

In order for the study to be comprehensive and accurate, CW3
Sweedon will be assigning key secretarial/administrative
support personnel from the various sections to serve on a
study group. The study group's job will be to aid in the
conduct of the workload survey, consider ways of improving
the present system, and to make recommendations that meet the
established criteria.

I am confident that the study will find ways to improve our
present system and anticipate that several civilian positions
will be eliminated to reduce costs. Because of this, I have
placed a freeze on civilian hire within the Division so that
no one will lose a job or have to be transfered elsewhere.

A question and answer period has been scheduled for 30
April, 1300 hours, in Room 200. All Secretarial/Administra-
tive Support personnel and Section Chiefs are requested to
attend.

                              William Cullen

                              LTC AGC

                              Adjutant General

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APPENDIX B

SYSTEMATIC METHOD FOR STRUCTURING ANALYSIS

a. Definition of the Problem

The problem should be defined in detail as determined in the preliminary activities. It should be based on the weaknesses of the present system.

b. Statement of the Objectives

The statement of objectives should be presented in such a manner that explains the relationship of the objectives to the overall problem. This author recommends the following objectives for a proposed WP/AS system: cost reductions, enhancement of job satisfaction, and ability to satisfy the principals needs.

c. Description of Alternatives Analyzed

The alternatives recommended are: (1) continue with the present system; (2) improved modification of the present system; (3) proposed system purchased during economic life; and (4) proposed system with continuous rental during full economic life.

d. Criteria Selected For Ranking Alternatives and Reasons for Selection

The following criteria are recommended for system evaluation: required rate of return of 10% on a discounting basis, how the system proposals contribute to enhancement of user job satisfaction, and the proposals ability to satisfy principal needs.

The required rate of return criteria is recommended because the Army's required payback period of four years does not always provide a rate of return of 10% as recommended by the Department of Defense [DoD, 1972]. The other two listed criteria are recommended for reasons stated in Chapter II.

e. Effectiveness Analysis

This section of the study should be aimed at measuring the effectiveness of each alternative in accordance with the criteria established in the previous section. Effectiveness has been defined by Anthony and Herzlinger [1975] as the relationship between a responsibility center's output and objectives. Therefore, the effectiveness analysis should evaluate the systems ability to contribute to user job satisfaction and the ability to satisfy the principals needs.

Although the criteria of ability to contribute to user job satisfaction and the ability to satisfy the principals needs are subjective in nature, the author has developed the following WP/AS Alternatives Rating Forms (forms adapted from Gottheimer's [1978]) for principals and uses (see Figures B-1 and B-2) to aid in the measurement of these criteria.

This author recommends that the WP/AS Alternatives Rating Form be given out to all principals and users. The survey should be conducted in a single session or by department by the person with the most knowledge of the alternatives so that any technical questions pertaining to each alternative

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can be answered. Once the survey is completed, the results
can be ranked and categorized by principal and user.

f. Cost Analysis

As discussed earlier, this author recommends the use of
rate of return as a criterion of ranking each alternative.
Utilization of this method is recommended because each
alternative can easily be ranked and compared against the
10% rate of return on a discounting basis that is required
by DoD. However, computing the rate of return is a more
complicated task than computing the payback period. There-
fore, the use of a calculator with this function is recommended.

g. Evaluation of Alternatives

This section of the study should contain a discussion of
the quantifiable factors of each alternative presented, such
as which alternative provides the highest rate of return.
In addition, a discussion of each non-quantifiable factor
such as the ability of each alternative to provide for the
needs of principals and users.

h. Recommendation

This section should include a recommended alternative
derived from the analysis.

```
┌─────────────────────────────────────────────────────────────────────────┐
│                     WP/AS ALTERNATIVES RATING                            │
│                      FORM FOR PRINCIPALS                                 │
│                                                                          │
│  Name:                          Instructions:  Using the following       │
│  Duty Position:                 scale of 0 to 5 rate each of the          │
│  Telephone Number:              alternatives for the particular          │
│  Date:                          service provided:                        │
│                                 0    1    2    3    4    5                │
│                                 poor         good      excellent         │
├─────────────────────────────────────────────────────────────────────────┤
```

Service Provided	Current System	Alternative 1	Alternative 2	Alternative 3
1. Telephone Services				
2. Typing Services				
3. Dictation, transcription, steno services				
4. Receptionist and other visitor services				
5. Conference, Meeting, and travel arrangement services				
6. Incoming-Outgoing Mail Services				
7. Messenger errand services				
8. Maintenance of files, manuals, etc.				
9. Message Services				
10. Reference or Research services				
11. Printing or duplicating services				

Specific Comments:

Figure B-1. WP/AS Alternatives Rating
Form for Principals

```
┌─────────────────────────────────────────────────────────────────┐
│                    WP/AS ALTERNATIVES RATING                     │
│                       FORM FOR USERS                             │
│                                                                  │
│ Name:                        Instructions:  Using the following  │
│ Duty Position:               scale of 0 to 5 rate each of the    │
│ Telephone Number:            alternatives for the particular     │
│ Date:                        service provided:                   │
│                                                                  │
│                              0    1    2    3    4    5          │
│                              poor           good      excellent  │
├─────────────────────────────────────────────────────────────────┤
│                         Current  Alternative Alternative Alternative │
│    Service Provided      System      1           2          3    │
```

Service Provided	Current System	Alternative 1	Alternative 2	Alternative 3
1. Telephone Services				
2. Typing Services				
3. Dictation, transcription, steno services				
4. Receptionist and other visitor services				
5. Conference, Meeting, and travel arrangement services				
6. Incoming-Outgoing Mail Services				
7. Messenger errand services				
8. Maintenance of files, manuals, etc.				
9. Message Services				
10. Reference or Research services				
11. Printing or duplicating services				

Specific Comments:

Figure B-2. WP/AS Alternatives Rating Form For Users.

APPENDIX C

Naval Postgraduate School

FORT SAXON'S

SEPARATION TRANSFER

SECTION

On 2 February, Major Paul Martin met with Colonel William Cullen, the Adjutant General (AG) of Fort Saxon, to discuss Martin's new job as Chief of the AG Military Personnel Office, MILPO (see exhibit 1). He had been assigned to Fort Saxon after his recent graduation from the U.S. Army Command and General Staff College. During the discussion Martin realized that the job of managing the personnel within the sections was going to be more challenging than he had expected.

Cullen explained that Chief Warrant Officer (CW3) Jerry Anderson had been assigned as the Chief of the Separation Transfer Section on 12 July of last year. In Col. Cullen's opinion Anderson was the most technically proficient warrant officer working in the MILPO. However, there had been friction between Anderson, his non-commissioned officer in charge (NCOIC), Sergeant First Class (SFC) Thomas James and the 16 civilian employees in the section.

This case was prepared by Captain John M. Hardesty under the supervision of Professors K. J. Euske and W. J. Haga. The case is intended as a basis for class discussion rather than to illustrate effective or ineffective handling of an administrative situation. Names and certain facts have been changed which, while avoiding the disclosure of confidential information, do not materially lessen the value of the case for educational purposes.

To help Martin get a feel for the problems in the Separation Transfer Section, Cullen handed him a copy of the latest employee grievance (exhibit 2), and the Civilian Personnel Office (CPO) endorsement to the AG (exhibit 3). Cullen said that he had resolved the grievance locally by holding a hearing concerning the grievance (exhibit 4) and taking remedial action (exhibit 5). The employee had subsequently been reassigned to the AG Reenlistment Branch.

Martin moved quickly into his new job. He initiated new procedures to improve the customer service in the MILPO operation; Col. Cullen had indicated that customer service was a problem. For example, he developed a survey of customer satisfaction, asking each person who used the MILPO Sections to fill out an opinion form. Whenever a customer rated a service as unsatisfactory, Martin had the responsible individual in that Section prepare a written reply to the disgruntled customer.

In Martin's judgement, the survey system was working well in the MILPO sections in Wright Hall because the number of unsatisfactory comments declined from 20 in March to four in September. However, he felt that it wasn't doing as well in the Bowers Hall building which housed the In-Processing and Separation Transfer Sections because he had received only three unsatisfactory comments during the same seven month period. Martin suspected that unsatisfactory ratings were not being forwarded to his office. He had expected a flood of unsatisfactory ratings in these offices because people are normally tired from the trip if they are incoming or frustrated with last minute red tape if they are separating from the Army.

In September, Fort Saxon was inspected by the Department of the Army's Personnel Management Assistance Team (PERMAST). The MILPO received satisfactory ratings in all areas. Martin was especially satisfied with the report's compliments on the effectiveness of the Separation Transfer Section. Since CW3 Anderson's assignment, the average time to process a separation had declined. In particular, the rate for expeditious discharges[1] had been cut from six days to less than three. Fort Saxon was only one of three Army installations which had met the Army's three day separation standard since the inception of the Expeditious Discharge Program.

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[1]The Expeditious Discharge Program is contained in AR 635-200. It is designed to administratively separate from the service those soldiers who are not fit for continued service and agree to the elimination action.

Morale in the Separation Transfer Section

While the inspection applauded the Separation Transfer Section, Major Martin was concerned about rumors of its low morale. SFC James had talked to Martin about CW3 Anderson's "iron fisted methods" and his effect on workers' satisfaction. In addition, a civilian supervisor, Ms. Davis, had retired. She had bridged the communication gap between the civilian employees and Anderson. Ms. Davis could not be replaced because of a freeze on hiring of civilian employees.

On 12 October, Mr. Bundy, Fort Saxon's Equal Employment Opportunity (EEO) officer and Mr. Keeble, the local representative for the National Association for the Advancement of Colored People (NAACP), visited the Separation Transfer Section in response to a complaint of discrimination submitted by a civilian employee, Ms. Perry. She alleged that the work she did was at a higher level than her job description. She felt that, since she assumed the duties of Ms. Davis, a GS-6, she merited a one pay grade increase from GS-5.

Bundry told Major Martin that three other civilians in the Section had asked how they could submit a joint complaint concerning their job descriptions.

Martin and Anderson scheduled a meeting for 13 October with all of the employees in the Separation Transfer Section. He instructed Anderson to ask the employees to submit any complaints that they had. Martin would then address their complaints during the meeting.

The following unsigned complaints were received before the meeting:

--- "CW3 Anderson is a lot of the problem down here. How do you expect people to open up when he shuts them all off before they begin. He changes whatever you do say around to suit himself, not listening to what is actually said. Being a liar does not create respect."

--- "You cannot possibly expect people to open up when CW3 Anderson begins a problem-solving meeting by saying, 'I am not going to ask you, I am going to tell you how it is to be.' He does not really listen to what you have to say. He does not understand the point that you are trying to get across."

--- "Employees are treated like children, causing resentment. Questions should not be answered, 'Because I say so.' Yelling accomplishes nothing but anger and bad feelings."

Martin told Anderson that his performance was exemplary and that the employee problems would probably blow over after the position audit.

That afternoon Major Martin informed Col. Cullen of the latest developments in the Separation Transfer Section. Cullen said that he was receiving a lot of heat from the Chief of Staff because Mr. Keeble (the NAACP representative) had talked to the Commanding General of Fort Saxon about the discrimination complaint filed by Perry. Col. Cullen said that the Commanding General's Chief of Staff would like to have Anderson reassigned to another unit.

Martin asked Col. Cullen if Anderson could remain as the Section's chief. He said that Anderson was doing an outstanding job, as indicated by the statistics. He told Col. Cullen that the employee who had submitted the complaint was a habitual complainer and that the complaint had no substance. Col. Cullen replied that he could probably hold the Chief of Staff off long enough for the U.S. Army Civilian Appellate Reviw Office (USACARO) to complete their investigation on 15 December. Col. Cullen also reported that the three employees who had inquired about a jcount complaint were no longer interested in view of the forthcoming position audit.

On 2 December, Anderson told Martin that he was upset because the civilian position audit was completed but Perry's position had not been upgraded. He said that, if the position had been upgraded, the discrimination complaint would have been dropped. Anderson was worried about the upcoming USACARO hearing. Martin told him not to worry because Perry's complaint would make the Civilian Personnel Office look bad.

On 15 December, a hearing on the discrimination complaint was held. Anderson told Maj. Martin his testimony (exhibit 8) went well and felt the investigation would not find racial discrimination.

On 23 December, before the Section was to have its annual Christmas party, Anderson was called by CW2 Todd, an agent in the Criminal Investigation Division (CID). Todd said he had been called by Ms. Perry, who reported that food taken from the Mess Hall without authorization was being stored at the Section for a Christmas party. She said the food had been acquired by Anderson and SFC James. Todd told Anderson that the CID does not normally investigate such matters but that, if there was any unauthorized food, it should be returned to the Mess Hall. Anderson had James return the food.

On 9 January, Major Martin called Anderson into his office to discuss a message that he had just received. Anderson had been selected by Department of the Army to serve

--- "It seems there is a constant uproar because we don't know what is expected of us. There seems to be a constant watch on us, as if we don't know what we are doing."

--- "I have no major complaint. After working at Trainee Personnel for two years, I think I died and went to heaven."

During the meeting, Martin discussed these complaints. He answered questions about Anderson's leadership style in a tactful manner, emphasizing that Anderson was still the boss who sets policy and procedures. Questions concerning work load pressures were answered by indicating that Department of the Army established the personnel separation time table and that these standards had to be met. He also announced that a pending staff reduction might eliminate one or two positions in the Section. At the conclusion of the meeting, Martin asked for suggestions on how the separation operation might be improved. No suggestions were made.

After the meeting Martin told Anderson that most of the questions were of little substance and asked him to make simplified work flow diagrams of the separation process. He also asked Anderson for any ideas he had that would resolve the conflict within the Section. Martin then remarked that it was odd that Ms. Perry had nothing to say during the meeting.

Job Description Analysis

On 14 October, Anderson handed Major Martin a Section organization chart (exhibit 6), and the work flow diagram for an Army separation that did not involve a retirement (exhibit 7). He also asked Martin if he could just discuss suggestions about the Section's problems rather than submit them in writing. Martin said yes and scheduled Anderson for a conference the following week.

At the meeting on 20 October, Anderson explained that some of the Section's job descriptions were not accurate. In his opinion, the entire Section needed a position audit. For example, Ms. Perry had taken over many of Ms. Davis' duties after her retirement but her job description still said she was a supervisor in charge of the write-up unit. Martin told Anderson to submit a request for position audits to the Civilian Personnel Office by 31 October. Anderson also said that he wanted to convert at least half of the civilian positions to military, especially the supervisory positions. He said the civilians were not interested in suggesting procedures to make the work flow better. He also said that the civilians were habitual complainers, probably because most of them were divorcees supporting a family. Martin agreed to let Anderson submit a conversion request even though he told Anderson that he feared additional civilian complaints.

on the staff of the Special Discharge Review Program[2] located in St. Louis for a five month period. Martin said that he would send someone else because he felt that the civilians might view his departure as a management retreat. Anderson, however, was disappointed in Martin's decision. He told his friends that it was time for him to move to another job; he was tired of being in charge of a bunch of complaining civilians.

Throughout January, Anderson made life difficult for Ms. Perry. He informed her in writing of every mistake she made. He circled her errors with red ink requiring entire documents to be retyped rather than simply corrected.

On 19 January, Anderson had an official counseling session with Perry about her unsatisfactory performance. Based upon what she viewed as harrassment, Perry submitted another discrimination complaint. This time the complaint was submitted to the Office of the Assistant Secretary of the Army for Equal Employment Opportunity (EEO).

On 22 January, Col. Cullen and Maj. Martin were informed by the Civilian Personnel Office of Ms. Perry's most recent complaint. They did not take this complaint seriously because the USACARO investigation report submitted to the Commanding General of Fort Saxon found no evidence to sustain Perry's first complaint of discrimination. In fact, they did not even bother to find out the details of the current complaint. The only action that the Commanding General took on the first complaint was to inform Ms. Perry of the finding and advise her of her right to appeal. He also directed that CW3 Anderson and SFC James attend the next CPO session of Position and Pay Management Training.

On 11 March, Ms. Perry received a letter from the Director of Equal Employment Opportunity, informing her of the results of her second complaint. The Director ruled that Ms. Perry was counseled and issued letters critical of her performance as acts of reprisal for previously filing an equal employment opportunity complaint in October. Based on this ruling, appropriate management officials were directed to remove and destroy all copies of counseling sessions. The letter also advised Ms. Perry that if she was not satisfied with this ruling, she could appeal the decision to the United States Civil Service Commission or file a civil action in an appropriate United States District Court.

A copy of the EEO Director's letter was also endorsed to the Fort Saxon Commanding General for other actions that he deemed appropriate.

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[2]The Special Discharge Review Program was established to process amnesty requests from military personnel who deserted during the Vietnam Conflict.

Assignment: What course of action should have been or
               should be taken by the AG, MILPO Chief
               concerning CW3 Anderson?

               Comment on the effectiveness and efficiency
               the Separation Transfer Section. What actions
               should have been taken to improve these areas?

EXHIBIT 1

FORT SAXON'S SEPARATION TRANSFER SECTION

MILPO Organization Chart

Military
Personnel
Office
(Bldg 1210)

Personnel
Management
Section
(Bldg 1210)

Personnel
. Actions
Section
(Bldg 1210)

Personnel
Records
Section
(Bldg 1210)

Redeployment
Section
(Bldg 1210)

Customer Service/
Operations
Section
(Bldg 1210)

Standard Installation
Division Personnel
System (SIDPERS)
Section
(Bldg 1210)

Trainee
Personnel
Section
(Bldg 804)

Separation
Transfer
Section
(Bldg 1202)

One-Stop
Inprocessing
Section
(Bldg 1202)

EXHIBIT 2

FORT SAXON'S SEPARATION TRANSFER SECTION

Rodger's Grievance

AG Mil Pers Office
Separation Transfer
Section

Commander
Fort Saxon
Attn: Civilian Pers. Office

I am submitting this grievance in the Step three subject:
Working under applied pressure which not only creates an
unpleasant working atmosphere but is contributive to and
aggravates my nervous problem, and is described as follows:

1) 100% accuracy - I work in this unit where the manage-
   ment constantly has urged us to strive for 100% accuracy
   and at great lengths. This is a form of applied pressure
   for there are few if any employees who can perform at
   this level.

2) False accusations of questioning Dr. Slip - On an
   occasion recently, when I returned to work with a Dr.
   Slip, I was questioned extensively about the authen-
   ticity of the handwriting as it apparently was suspect
   to them.

3) Constant nit-picking - There is constant nit-picking
   concerning inter-office movements and being observed
   closely while working at my desk for non-work.

4) Meetings of two management officials with one employee -
   When I have met with management either at their request
   or mine, recently the meetings have had two management
   officials present and I the only employee, leaving me
   at a disadvantage.

5) Utilization of first line supervisor - Much of the time
   our immediate supervisor is bypassed and much of the su-
   pervision assumed by the second line supervisor, thereby
   denying us a line of supervision which perhaps is more
   attuned to problems at the immediate level.

My representative is William A. Hanks of AFGE Local #8703.

William A. Hanks   Thelma Rodgers
AFGE Local #8703

EXHIBIT 3

FORT SAXON'S SEPARATION TRANSFER SECTION

Grievance Endorsement to the AG

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGCEN.

REFERENCE OR OFFICE SYMBOL	SUBJECT
APAA-PA-CP-M	Grievance - Thelma Rodgers

TO AG	FROM CPO	DATE 19 Nov	CAT 1

1. Ms. Thelma Rodgers, Military Personnel Clerk (Typing), GS-4, Separation Transfer Section, has submitted a grievance regarding working conditions.

2. In accordance with the grievance procedures, every effort must be made to resolve the grievance locally. In addition, a final review and attempted resolution by the Activity Commander is required.

3. Request consideration be given to the grievance and this office be furnished your specific and detailed comments and recommendations.

FOR THE CIVILIAN PERSONNEL OFFICER:

DOROTHY SIMPSON
Labor Management and Employee
Relations Specialist

DA 2496   REPLACES DD FORM 96, WHICH IS OBSOLETE.

EXHIBIT 4

FORT SAXON'S SEPARATION TRANSFER SECTION

Local Grievance Hearing

COL Cullen   I have called this meeting because a Step three
              grievance has been submitted by Mrs. Thelma
              Rodgers. The responses will be recorded.
              Persons present are Ms. Rodgers, Ms. Smart, Ms.
              Jones, Ms. Hardy, Ms. Molen, Mr. Jeffers,
              (employees of Separation Transfer Section); Mr.
              Robert Lawson, Chief, AG Admin Services; and Ms.
              Carlsen, recorder. Mr. William B. Hanks, a
              representative of AFGE Local #8703, represents
              Ms. Rodgers. I would like to start this off by
              asking Ms. Rodgers to expound on her grievances
              and specify what they are. I have gone through
              Steps one and two and cannot find specific
              complaints. I have looked several times and
              cannot find specifics. If there are others of
              you here who are not dissatisfied, please feel
              free to excuse yourselves. Ms. Rodgers, would
              you please, for the record, reduce your griev-
              ance to specific items.

Mr. Hanks   To start off with, we are not prepared for this.
              We are prepared only to answer questions. We
              were not given sufficient notice to prepare for
              a formal hearing.

COL Cullen   Would you be able to speak for Ms. Rodgers?

Mr. Hanks   I will not attempt to do that. We are not
              prepared to present it formally.

COL Cullen   If this is the case, we will just cancel this
              right now. When did you find out about it?

Mr. Hanks   I was not notified until 1:00 P.M. today.

Ms. Rodgers   We were not aware that there was a meeting until
              just before lunch. I was asked if I would be
              back before one o'clock.

Ms. Molen   I was told to go in to see Chief Anderson and
              they said "Just go into his office." About that
              time the rest of them said we were to come over
              to see Mr. Lawson and I did not know what it was
              about until then.

COL Cullen   That being the case, what do you feel would be
              ample notice?

Mr. Hanks   This is not the normal procedure for a grievance.

COL Cullen   I have been advised that I am to conduct the Step three.

Ms. Rodgers   But we are not prepared to make a formal presentation. I suppose I will have to take remedial action.

COL Cullen   Remedial action, what does that mean? I have read your complaint and am taking remedial action. Number five is "utilization of first line supervisor." What does that mean?

Ms. Rodgers   Procedures were set up as to who the records went to at what time--this procedure has not been followed. There may be steps and sometimes an error that everybody has missed and it does not go back through the same steps. You don't know who is responsible. The only thing that occurs is you get chewed out by Sgt James.

COL Cullen   If an error exists and everybody has missed it, you think that it should go back through the same treadmill?

Ms. Rodgers   Right, if everyone missed it, then maybe it was an oversight, but I feel that everyone should be aware of it.

COL Cullen   Is there a written procedure established?

Ms. Rodgers   To my knowledge I have not seen one.

COL Cullen   Do you have a desk SOP?

Ms. Rodgers   Yes, but since Sgt James has been there everything has been rearranged, and if there is a new one I have not seen it.

COL Cullen   Whose responsibility is it?

Ms. Rodgers   I guess it is management's, if they would stick to one.

COL Cullen   I will see that they establish a written SOP.

Ms. Jones   I think a lot of this stems from when you are dealing with records--we are not getting the changes--somebody gets them and sticks them in a file. The ones that are going to be affected by these changes should be notified and discuss the changes. So many times we are not aware and

things come back saying this is wrong, but they are not wrong if you were not told what to do in the first place.

COL Cullen   Do you have middle management supervisors?

Ms. Rodgers   No. My immediate supervisor is Ms. Davis and quite often I have tried to talk to her and cannot get through because of Sgt James. A problem is not resolved because I cannot get through to her.

COL Cullen   Did this same problem exist under LT Sullivan before CW3 Anderson took over the Section?

Ms. Rodgers   Do you want the truth?

COL Cullen   I certainly do.

Ms. Rodgers   Then, yes Sir, it has been like this ever since Major Andrews left. (Replaced by Major Martin).

COL Cullen   So, the gripe is against Sgt James, is that right?

Ms. Rodgers   Well, these precedures. For instance, in December we got a message pertaining to a fraudulent enlistment. I went to my immediate supervisor with it. Sgt James walked by and overheard us and told us not to worry about it and informed us that there were no records in the office now. So later that day a record came into the office and no one was notified how to do it, so we did it like we always do. There is a lack of communication.

COL Cullen   How about the rest of you--is there a communication gap?

Ms. Molen   I find that at times, if we do have a problem, it is hard to sit down and explain to him the problem having to do with any individual in the office. He has told me that I am a perfectionist, which I am by no means. I feel that at times when I was brought to that office to do a job a certain way, and I tried to do it to the best of my ability--If I check a record and find something wrong--you get the feeling that you are checking on someone. I feel that it is hard to explain anything to Sgt James.

COL Cullen   Do you feel that if a written SOP were established and distribution made to everybody that it would solve the problem?

Ms. Molen   If one were written and it was followed, I think
              some of the lack of communication would end--but
              there are so many changes that its hard to keep
              up with them.

COL Cullen   Are you talking about regulation changes or
              procedures?

Ms. Molen   Both. When we get the records, if there was
              anything wrong, we send them back for
              corrections. When Sgt James came this was
              changed and we had to do the changes and
              sometimes it is hard to find them to correct--
              sometimes as many as ten records will come in
              at one time and seven will be wrong.

COL Cullen   What kind of errors are you talking about?

Ms. Molen   Orders are wrong--posting is wrong--AWOL's not
              posted--there may be three or four things wrong
              with the record at the same time. We were told
              to send them back if they were wrong. Since Sgt
              James came we have to stop whatever we're doing
              and correct them. Say you are working on a re-
              cord and the last entry on the 2-1 was an in-
              dividual was assigned to the Reception Station
              and had been reassigned twice--when you have a
              stack of records to do, it takes time. Stops
              the other work in the office. If we have the
              time to do it nobody minds doing it.

Ms. Rodgers   On cases we have found errors that one individ-
              ual has made repeatedly--we will go back to see
              who made the mistake, but Sgt James will say,
              "Don't worry about it, just change it."

Mr. Jeffers   As far as really being unhappy, I can't say that
              I am. I think in my own personal view we are in
              a situation to where we get people saying "get
              these people out"--we're really pushed--I feel
              we stay reasonably busy. But we will get
              records with lots of mistakes and it takes time
              to fix the stuff. We have talked to Sgt James
              about it and he just says that they are short-
              handed too. They just kind of send the records
              down to us and then we are supposed to try to
              get all this stuff right. All this takes our
              minds off of what we are supposed to do. Going
              back to Maj. Andrews, he dictated the way to do
              it and it all went smoothly. I am saying that
              we know we have 72 hours to get this guy out and
              don't have time to discuss how we are going to
              do it. I think that a lot of times I get mad,

everybody does, but we are caught between a rock and a hard place. I think one thing that might alleviate the problem is to have one person decide what we are going to do and then maybe there wouldn't be time for questions and things. Maybe if we had a clear cut policy on the way to do things, maybe it would help. I don't think I could write a SOP and I think it would be very hard to do, and as far as who made the error--I make errors, everybody makes errors, and I think that if we took it back every time we would lose a lot of time, but the biggest thing that's wishy-washy is reenlistment codes. We have people on our backs wanting these things out--we just have lots of problems that I don't think there is a real easy solution to. Some problems are personalities between individuals. As far as being really unhappy down here, I am not.

Ms. Jones   I was in the Retirement Section and I went to retirement seminars with LT Sullivan and when we came back I was told I was no longer in Retirement, and I'll tell you one thing I think I should have been told why, and I think Sgt James goes at things in a heat and always not talking to the person concerned and I feel that I should have been told. You can take problems to Sgt James and when they concern certain ones nothing is done about it. Then you are told that you are a trouble maker. I feel that I do the best that I can, so I don't feel that seeking causes is being a trouble maker and I cannot get an answer from Sgt James. I try to do the best I can. I feel that I cannot get a plain answer from Sgt James. It's not the way you should be able to get advice from your supervisor. I don't know any way to straighten them out. So now when I have a problem I just go on and when the record comes through and there are conflicting things, little things, then there has been no effort to correct this and when they get to me, I don't know how to correct them because I don't know what is correct. Now, we cannot call to find out what is correct and then you wait until the man comes in and it's bad because you don't know what to do and when it's wrong you don't know what to do. The retiree goes to National Guard and they call me and tell me the record is wrong and so I say send it back. One in particular was on pay because the 214 was wrong. So I took it to Sgt James and he was very unhappy. He said I use the phone on personal business and you receive a lot of personal calls. I said I didn't use the

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phone on personal business, they are people from State National Guards and they are strictly on business pertaining to 214's.

COL Cullen   How was it when Ms. Albey, the former civilian supervisor, was there?

Ms. Jones   Ms. Albey was a trouble maker, she would get the gist of anything and put it in her terms and her ways.

Ms. Rodgers   One certain incident, I had requested sick leave in advance. I was called into the office three days in a row pertaining to this. All three times my immediate supervisor was excluded. Accusations were made in these meetings that were entirely false.

COL Cullen   Is that in regard to Item two, in your grievance?

Ms. Rodgers   Right. That was one of them, but it had to do with a statement about another person that I did not make. She had walked past my desk and overheard just a few words and put in her own words and came up that I had been talking about this one girl. This was not true. I remember the whole thing and I had not said a word. I felt it was kind of two against one because Management had two people and my supervisor was not included. Then I was on leave for three weeks. I came back and the very day I came back the same thing happened again. Only since I started this grievance has Ms. Davis even been a part of this. They state clearly that she's part of management. Evidently she was not aware of any of it--any meetings. There was a statement that was made about drinking and I said if I did this I would turn into an alcoholic. I don't drink, but some way it got twisted around and that I had said that he was trying to make me an alcoholic. That was the excuse as to why I was called in there. Had they come to me and asked me, I would have told them and it was nothing at all like they interpreted it.

Mr. Jeffers   I was the one that said that. CW3 Anderson was trying to find out. I thought that was what you said, if not, then I am sorry.

COL Cullen   I am not sitting in judgment about whether anybody is an alcoholic. What's the complaint about having pressure reduced?

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Mr. Hanks   That overall covers quite a large territory.

COL Cullen   Regulations stipulate what will be done. We
              have a workload to accomplish and I realize that
              it causes pressure. It would appear to me that
              if one is not able to cope with the pressure re-
              quired by regulation then they would seek to go
              somewhere else.

Ms. Rodgers   They are normal pressures you are talking about.
              It is the other unnecessary pressure--the little
              nit-picking things that are said or done that
              you really can't put your finger on and they all
              kind of build around you. I realize that there
              are pressures for the normal work--it is unnec-
              essary, that is, they try for 100% accuracy, but
              if you write up a work sheet and it contains er-
              rors, we are instructed that we would get the
              paper back to do it again instead of getting it
              back for correction of the error. We were told
              we would get it back without the record to redo-
              --that is unnecessary pressure. You can't do
              your work right because of this pressure.

Ms. Molen   When we are backlogged with records and you know
              you have to get these records out, nobody is
              surprised if some are coming back for correc-
              tion, but when the work is backed up--the main
              pressure is in the typing section--if any are
              rejected they have to go back to be typed over.
              I feel that typing is the most pressure. If
              there is something wrong they have to be retyped
              right then and it causes a lot of pressure
              because of this. They do strive for 100% ac-
              curacy, and its normal to make one or two small
              mistakes, but when you are under pressure you
              make more mistakes than usual.

Ms. Smart   I am one of the typists and we were short one
              individual and a slot was going to be filled so
              that we would have three typists. I think that
              we have most of the pressure because everything
              that goes through the office eventually comes
              back to typing and we have to have them done by
              time to go home. You do have a pressure job.
              One particular day one other girl and I were
              called into Sgt James' office and chewed out for
              not getting the records out. But I took that to
              my supervisor and we got that hashed out. I be-
              lieve we definitely need one more individual in
              that section because now we have the officers
              and we were told that if there are any mistakes
              we have to take them to our supervisors. I
              think this is a waste of time, why can't I do

this myself?

COL Cullen   It appears to me you have a dichotomy amongst
yourselves. Now, let's go on to item four of
the grievance.

Ms. Rodgers   Each individual that works there maintains a
separate folder and we were told to bring them
to the office. All these are kept in a file. A
copy of my grievance is kept in that office and
I think that is wrong.

COL Cullen   We can get the grievance removed from the file.

Ms. Rodgers   I would like to read the one that's in their
file. I think that some of the wording has been
changed. They referred to my "mental condition"
--I don't have a mental condition, I have a ner-
vous condition.

COL Cullen   If the grievance is in the management file, I
will get that removed. There might be others in
the office that might have similar feelings that
might like to talk to me. My door is always
open.

Ms. Rodgers   I have been instructed by Ms. Ball, CPO, that if
I saw an announcement to give her a call and she
would put my name on it. I requested from Sgt
James to make a call of that nature. First he
refused, said he would make it. But finally, I
had to agree to let him listen. To me, I think
that is a violation of the Privacy Act. I think
that if we decided to talk to you he would not
let us.

COL Cullen   If your supervisor does not want you to talk to
me, let me know. I don't think monitoring a
phone call is a violation.

Ms. Rodgers   Another thing, I had gone for a job interview--
this happened over the holidays, the Wednesday
before Christmas. I came back after the holi-
days and noticed that the paper sent to me by
CPO concerning the job interview had been
opened. I noticed that it had two staples in
it. I picked it up and there was only one
staple. Somebody felt it necessary to find out
what I was getting. I am saying that somebody
opened that and I feel that that is a violation
or at least distasteful.

COL Cullen   You know what I would think of something like
that. This almost gets down to petty animosi-

	ties. I think it's trite when you count the holes in a piece of paper to find out if someone is spying. if you are that suspicious, then I will encourage you and try to help you find another job.
Mr. Hanks	Under the circumstances this is almost the rule rather than the exception there. This is only part of what is happening there. Why are these things happening?
Ms. Smart	One injustice I feel has been brought against Ms. Rodgers, she is no longer the Section head. Her capabilities should have nothing to do with it.
COL Cullen	Was she told why?
Ms. Smart	Not to my knowlegde.
COL Cullen	Was some else appointed?
Ms. Smart	Not to my knowledge. We were just told not to ask Ms. Rodgers--stay away from Thelma.
COL Cullen	You are making the allegation that because of her filing the grievance she has been changed from Section head?
Ms. Smart	Since the Grievance has been filed, she is no longer the Section head. The people have been informed not to ask her anything because she is no longer the Section head.
COL Cullen	That particular allegation, I will have to investigate with CW3 Anderson. We will go back to Item five of the grievance.
Ms. Rodgers	I usually get to work early and talk to Ms. Davis and have been told not to talk to her outside duty hours.
Mr. Lawson	If they are talking business they could file a claim for working overtime.
Mr. Hanks	I don't think that would be done.
Ms. Rodgers	Sgt James told Ms. Davis that we are not to discuss business before work. I think that might violate freedom of speech.
Mr. Lawson	The freedom of speech means they can talk about anything but work before work.

Ms. Rodgers   I have a question on flextime. Maybe my under-
standing is not perfectly clear. I know we are
authorized to change our working hours.

COL Cullen   Within certain limits. As far as I am concerned
on assembly line processes you couldn't afford
to use flextime. Flextime is available for
people in a more or less fixed time. You either
begin early and stop early or begin late and
stop late, etcetera.

Mr. Hanks   There are two schools of thought. This is not
all that we have been told. There is a question
about it. We have had some instruction from CPO
but then I am not clear on this myself.

COL Cullen   Would you say that if an individual has to leave
early it is OK?

Mr. Hanks   Some flextime can be changed from one day to the
next.

COL Cullen   I would have to get an interpretation on that
because I could not see any office run or allow
any person to work that way.

Mr. Lawson   It is injected in there that if a person has an
appointment then allow flextime as the workload
permits.

Ms. Rodgers   At first when it came into being that was the
way it worked. Just recently we were informed
that the flextime was only for our beginning and
ending, any other would be considered leave. In
the section I am in, I come at 7:00, one at
7:15, and one at 8:00. There is no section left
at any time without someone working.

COL Cullen   I will get a reading from CPO and get out in-
structions about flextime. Now the next item,
there is no prohibition against using the phone
if you were instructed by CPO to call them, then
I think you have every right to call them.

Ms. Rodgers   Since this grievance, I think there has been
unfair action directed toward me. If possible, I
would rather go ahead and transfer.

COL Cullen   I want to follow this grievance through to its
proper conclusion because this discussion
indicates that changes need to be made.

Ms. Rodgers   I am at present hesitant about putting in a 123

for promotion because I am not sure what grade I would get.

COL Cullen   Go ahead and try to do the best you can. I would not tolerate anybody being subjective or vindictive about a 123. I think that's probably carried it through at this point. What I want to do is get a transcript of this and then go back through to the people in management to get the other side of the controversy. If necessary we will hold another meeting with the assembled group and management. As soon as I have a transcription, CW3 Anderson and Sgt James will be informed of what I have told you.

Ms. Jones   I have been in this job since last April and have asked for a job description. So I asked Ms. Davis and she said she sent up job descriptions and they were sent back.

COL Cullen   When?

Ms. Jones   Sometime about the middle of the fall. Well, I want to know what I am supposed to be doing. Ms. Davis said that they were supposed to write up another one and submit it but then they said CPO would have to reevaluate the job. I said well I will wait until after Christmas.

Ms. Molen   Back to the SOP--about eight months or a year ago Sgt James asked everybody to write down what they did. I wrote mine up and gave it to Sgt James and he was supposed to give it back and he has never given it back.

COL Cullen   We will adjourn the meeting now. Thank you for coming this afternoon.

EXHIBIT 5

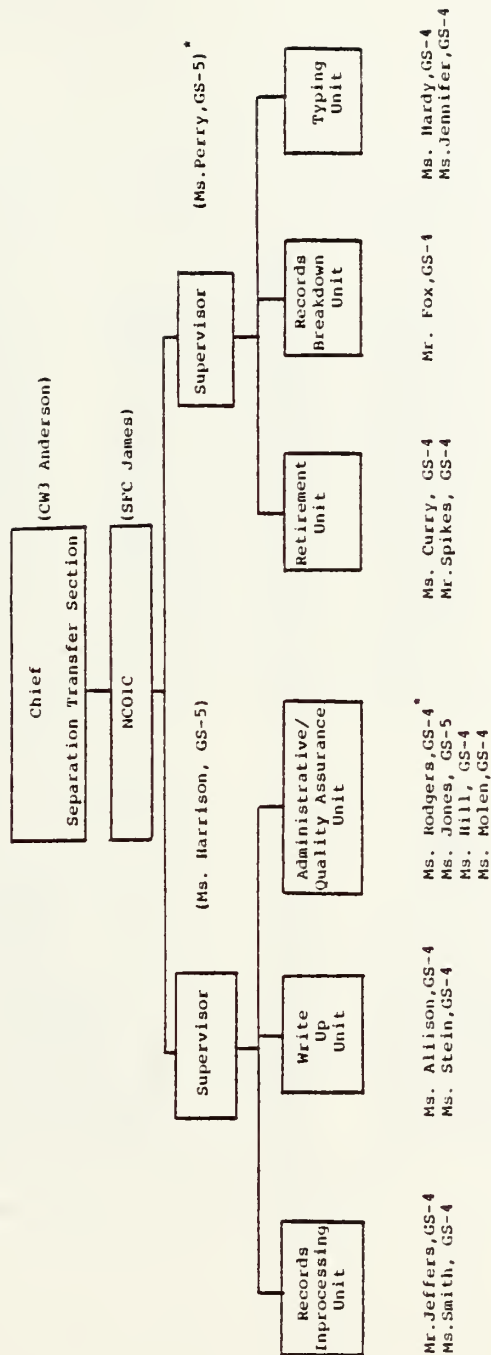FORT SAXON'S SEPARATION TRANSFER SECTION

Grievance Remedial Action

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is TAGCEN.

REFERENCE OR OFFICE SYMBOL	SUBJECT
APAA-AG	Grievance - Thelma Rodgers

| TO CPO
ATTN: Labor Mgt & Employee
Relations | FROM AG | DATE 18 Jan
COL Cullen/rb/2133 | C+T |

The following is a summary of grievance action:

    a. An SOP will be reduced to writing insofar as practical. Due to specifics involved, a detailed procedure may not be possible.

    b. Grievance file will be removed from employee office file and filed elsewhere. Employee was assured this office file would not be transferred if employee should be reassigned.

    c. It was ascertained that title of Section Head was removed to relieve some pressure on Ms. Rodgers.

    d. Management has been instructed to seek ways to bridge the communication gap. To this end, assistance will be sought from CPO to aid in improving management-employee relations.

    e. The Chief of MILPO was instructed to seek a position within his operation to laterally reassign Ms. Rodgers. However, should she be selected for a vacancy outside AG, I would be willing to release her.

    f. More latitude in application of flextime will be made, consistent with mission accomplishment.

    g. The minutes of a meeting held on 5 Jan 77 are attached.

                    W. B. Cullen
                    Colonel, AGC
                    Adjutant General

DA FORM 2496   REPLACES DD FORM 96 WHICH IS OBSOLETE.

EXHIBIT 6

FORT SAXON'S SEPARATION TRANSFER SECTION

Separation Transfer Section Organization Chart

Chief
Separation Transfer Section   (CW3 Anderson)

NCOIC   (SFC James)

(Ms. Harrison, GS-5)   (Ms. Perry, GS-5) *

Supervisor   Supervisor

Records
Inprocessing
Unit

Write
Up
Unit

Administrative/
Quality Assurance
Unit

Retirement
Unit

Records
Breakdown
Unit

Typing
Unit

Mr.Jeffers,GS-4
Ms.Smith, GS-4

Ms. Allison,GS-4
Ms. Stein,GS-4

Ms. Rodgers,GS-4 *
Ms. Jones, GS-5
Ms. Hill, GS-4
Ms. Molen,GS-4

Ms. Curry, GS-4
Mr.Spikes, GS-4

Mr. Fox,GS-1

Ms. Hardy,GS-4
Ms.Jennifer,GS-4

* Ms. Perry assumed the majority of Ms. Davis' duties upon her retirement.

* Ms. Rodgers is still charged against the Separation Transfer Section
even though she was reassigned to the Reenlistment Branch.

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EXHIBIT 7

FORT SAXON'S SEPARATION TRANSFER SECTION

Army Separation Work Flow Diagram

Records In-Processing Unit

1) Receives and screens incoming person-
   nel and finance records for required
   documentation and accuracy.
2) Initials DA FORM 4188-R
3) Submits request for separation orders
   (DA FORM 2446)
4) Forwards finance record to Finance
   Section
5) Forwards personnel record and allied
   documents to write up unit.

Administrative Quality Assurance Unit

1) Reviews all documents prepared by the
   typing unit for accuracy.

Write-Up Unit

1) Prepares DD FORM 214 WS

Chief Separation Transfer Section

1) Reviews and signs all separation
   documents.

**Administrative/Quality
Assurance Unit**

1) Reviews DD FORM 214 WS against
   personnel records for accuracy
2) Submits SIDPERS transaction on
   DA FORM 3B13
3) Forwards personnel record and
   allied documents to typing unit.

Administrative Quality Assurance Unit

1) Checks each file for required documen-
   tation prior to orientation briefing.

Typing Unit

1) Prepares the following documents
   A) DD FORM 214   E) DD FORM 256A
   B) DD FORM 473   F) DA FORM 1811
   C) DA FORM 664   G) DA FORM 3082-R
   D) DD FORM 1407   H) APPS-PA FORM 3905

NCOIC Separation Transfer Section

1) Conducts separation orientation.
2) Insures individuals sign all required
   documents.

Records Breakdown Unit

1) Forwards Health, Dental, and personnel
   records to appropriate government agency
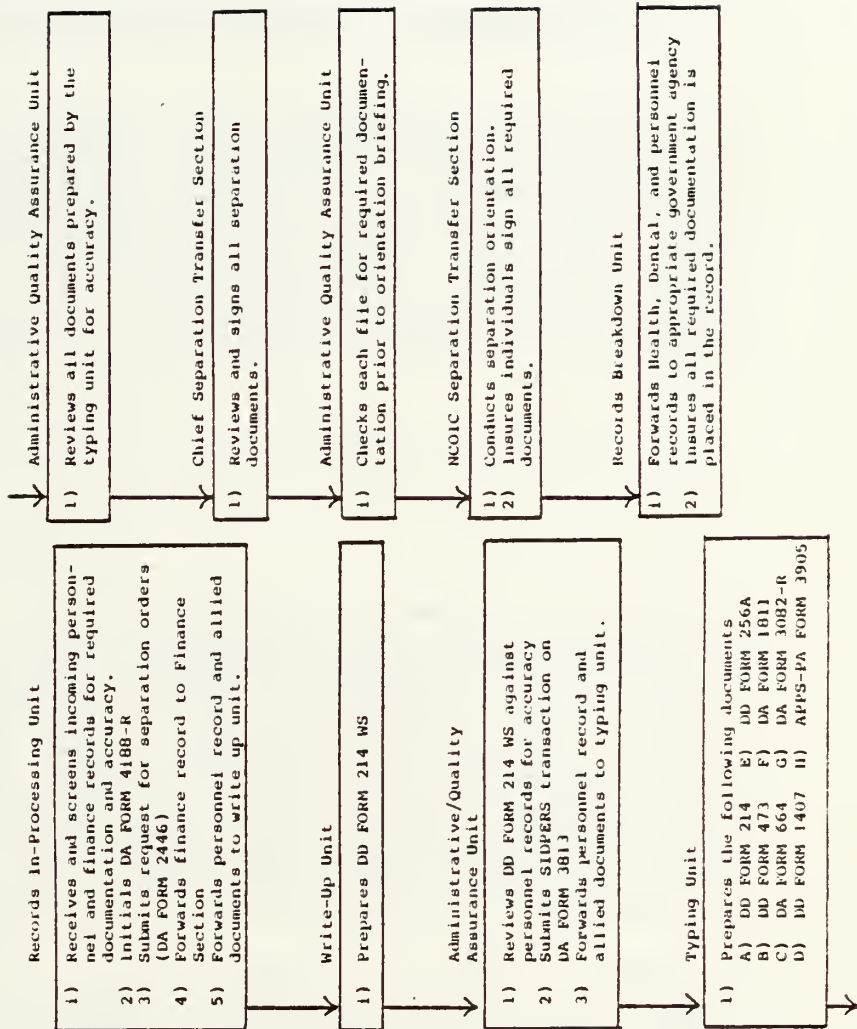2) Insures all required documentation is
   placed in the record.

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EXHIBIT 8

FORT SAXON'S SEPARATION TRANSFER SECTION

Anderson's Testimony During the USACARO Hearing

MR ALLEN: I am Robert Allen, an EEO Investigator from the US Army Civilian Appellate Review Office, Atlanta, Georgia. I am here to investigate a complaint of discrimination against you and SFC James, filed by Ms. Perry of 17 November. She alleges that she has been discriminated against by you and SFC James because of her race which is Afro-American. I have already explained to you that statements such as yours are made under oath and without a pledge of confidence. I have shown you a copy of the Privacy Act Notice that applies to this type of investigation. Do you have any questions or reservations about what I have said so far?

MR ANDERSON   No sir.

MR ALLEN: Do you have any objections to taking an oath?

MR ANDERSON: No sir.

(OATH ADMINISTERED)

MR ALLEN: Ms. Perry claims that she came into the Separation Transfer Section in June, and at that time was assigned as a Supervisor, Records Breakdown Secction, Typing Section, and Officer Separation and Retirement Section. The essence of Ms. Perry's complaint is that she replaced the former incumbent who was Ms. Davis, in that position and has been performing the duties that Ms. Davis had been performing up to that point. But that where Ms. Davis had been a GS-6, Ms. Perry had performed those duties as a GS-5, and has been unable to get any adjustment made in that grade. Her contention is that the reason she has been unable to get any adjustment made is because she is Black. This is really the essence of the complaint of Ms. Perry. I would simply ask you to comment how you see fit.

MR ANDERSON: I cannot respond to what duties Ms. Perry had when she got there. I assumed my duties as Chief of the Separation Transfer Section on or about 12 July. When I arrived, Ms. Perry had the responsibilities of a Supervisory Military Personnel Clerk. She had initial responsibility for the initial preparation of the write up, or initial preparation of all records and associated separation documents for officers who were Released from active duty (REFRAD), discharged or retired, along with the preparation of all records for enlisted personnel who retired at this installation. To be more specific she was supervising the

retirement unit, records breakdown unit, and the typing unit within the Separation Transfer Section. Her duties have remained the same since my arrival on or about 12 July. Does that answer that first question?

MR ALLEN: Yes sir. I think so. One of the main things I am getting at is that you don't know from personal observation what Ms. Davis might have been doing before you got here.

MR ANDERSON: That would be impossible, sir. How can I answer something when I wasn't here? I couldn't respond to what Ms. Davis had done because I came in here and went to work, and when I arrived Ms. Davis was performing the duties of the write-up unit along with many other duties; such as, Ms. Davis was frequently called upon to go in and give orientations to 30, 40, 50, or 60 people that we had. In addition to that she was required to assist me in writing any documents or reports, or any inquiries we had from MILPO or the AG. Because of Ms. Davis' experience and her expertise in the military personnel field she was called upon daily by management to assist them; whereas Ms. Perry was never called upon to go into the orientation room and do an orientation or assist me in the preparation of documents. Ms. Davis was occupying a GS-6 position when I arrived at Separation Transfer Point. To the best of my knowledge, Ms. Davis had been a GS-6, and had held that position several years, when I arrived.

MR ALLEN: Looking now, at the idea of job descriptions. Do you recall whether there was any consideration given to job descriptions, per se, that Ms. Perry's job discription said something other than what her actual duties were?

MR ANDERSON: No, I cannot see that, sir. Military Personnel Clerk Supervisor is her job description. To the best of my knowledge Ms. Perry performed duties in her job. We are in the process of separating people from service and when I say separate, we are discharging a man or he has been REFRAD or some type of action is taking place. When we get the record the case is finalized. We are either involved with writing the record up, typing the record up, or checking the record.

MR ALLEN: Well, what I am getting at, for instance you had two people down there, one classified as a Supervisory Military Personnel Clerk GS-5 and one Supervisory Military Personnel Clerk GS-6. Is that true?

MR ANDERSON: That's correct.

MR ALLEN: Obviously then there's got to be some difference in the duties that they perform?

MR ANDERSON: I just explained that to you sir. Ms. Davis had overall responsibility; in other words, she was an assistant

to the NCOIC and the OIC. When we talk about all the things we do we are talking about a lot of time. This took up a lot of Ms. Davis' time. I wasn't under the impression that we were here to discuss Ms. Davis.

MR ALLEN: O.K. What I'm getting at is, were these duties that we are talking about that Ms. Davis was performing recorded in the official job description that was on file for her?

MR ANDERSON: What do you mean recorded, sir? She was performing the duties of a Military Personnel Clerk Supervisor. That's what Civilian Personnel has on file. That's what I had on file in the file that I kept, those were the duties that she was doing.

MR ALLEN: What I'm getting at is, very often you run into a situation where, you'd have a piece of paper that contained a description of the duties but it may not be an accurate description of what is actually being performed.

MR ANDERSON: Sir, we have several jobs down there. There are four jobs that are interrelated. When we have people gone on maternity leave we have to have somebody do their job. I cannot have a job description for 18 employees, a different job description, right?

MR ALLEN: Well, it can be done.

MR ANDERSON: It could not be done there. Because we wouldn't get the job done. We couldn't separate the people. Getting back to Ms. Davis, Ms. Davis and the NCOIC supervised the rest of the people. Ms. Davis worked directly under the NCOIC. I, at times, have given Ms. Davis work to do for me, sometimes it might take a few hours, sometimes longer. That takes her away from her job. The people that Ms. Davis didn't supervise, the NCOIC supervised.

MR ALLEN: O.K. The things that Ms. Davis was doing that would have caused her grade to be higher than Ms. Perry's, right, should have been accurately recorded in her written job description.

MR ANDERSON: They were, sir. They were recorded in her job description.

MR ALLEN: Accurately?

MR ANDERSON: What do you mean accurately? Every word in the job description? When you say accurately I don't know what you mean sir. But, to the best of my knowledge, the files are available at the CPO, the woman performed the duties for which hired. Whether or not she supervised the exact number of people that was in her job description, I couldn't respond to

that, because our strength fluctuates at the Transfer Section. Do you understand what I am trying to say?

MR ALLEN: I believe so.

MR ANDERSON: We couldn't say that Ms. Perry supervised five people this month and the next month it may be more.

MR ALLEN: I think I understood you to say that at the time you went in there that Ms. Perry was a supervisor to the Records Breakdown Section, Typist Section, and Officer Separation and Retirement.

MR ANDERSON: That's right. That's what I said.

MR ALLEN: Do you recall anytime since you've been in there, Ms. Perry saying directly to you, or SFC James to you, that she felt her job description or her grade wasn't right?

MR ANDERSON: No, I do not recall that. I do recall that when we were working on the job description she and her supervisor went over the job description in detail. But basically, I found nothing wrong with the job description other than there were some words that were obsolete in the job description.

MR ALLEN: All right. Then at some point, and apparently not too long ago, something was set in motion to have the job description re-written.

MR ANDERSON: SFC James and I talked about that a long time before that thing came up. We were pressed for time, and I talked to the Chief of MILPO, and based on that and the fact that Mr. Bundry had visited our office, we considered that the appropriate course of action. That we would try to further define job responsibilities within the Separation Transfer Section.

MR ALLEN: I understood somewhere along the line that there was some sort of a get together between you, SFC James, Ms. Perry and Ms. Davis.

MR ANDERSON: Let me go back. I knew of no such thing that we ever had a 'get together.' Now we have meetings and certain things are disseminated when changes occur, but as far as having a meeting about job descriptions between Ms. Davis and Ms. Perry and SFC James, I am not aware of such a meeting.

MR ALLEN: Would it still be true, nevertheless, there were draft job descriptions prepared for Ms. Davis and Ms. Perry, individually, and some other job descriptions at this time I don't know how many or for whom.

MR ANDERSON: Well, I know. There was a draft job description for Ms. Perry. We requested that. The current job

description for her position was inadequate and required reaudit. This is on file in the CPO Office. The current description does not encompass the duties assigned and performed by the encumbent. Additional duties should be realized with the duties in Separation Transfer Section that were put into effect. The duties within the Records Breakdown, Reitirement Unit, Typing Unit require technical and administrative supervisory responsibility for approximately 800 to 900 separations monthly. I use that word loosely. In the summer it increases, in the winter it decreases. The nature of the supervisory duties are highly sensitive and require explicit knowledge and professional expertise in Separation Transfer. This went out to CPO and we requested that that job be upgraded to the grade of GS-6. We had two jobs back in the Retirement Unit which consisted of Ms. Curry and Mr. Sikes, and the duties performed were identical. When one is gone on leave the other performs the duties while they are absent. Those positions were recommended to be upgraded. The other two positions that I felt warranted consideration to be upgraded were the positions that were occupied by Mr. Jeffers and Ms. Smith. They are down in the In-Processing. Those were submitted and our audit was conducted by Mr. Tom Cook, CPO. Do you need the date, sir?

MR ALLEN: If it's readily available.

MR ANDERSON: It was completed on 2 December. The audit concluded that sufficient justification could not be provided by Management or employees who were interviewed--except Mrs. Hill, who was the only employee that was not interviewed; she requested that she not be interviewed--to warrant upgrading the positions within the Separation Transfer Section.

MR ALLEN: Can you tell me; was the basis for saying there was not sufficient justification that the written description that had been sent in as a proposed Job Description was simply inadequate to justify a higher grade?

MR ANDERSON: No sir. What I am saying is that the work that we do doesn't justify upgrading the position. The job description was brought down by Mr. Cook, each employee was set down and gone over their job description with the employee in detail.

MR ALLEN: That was the job description they had had all time?

MR ANDERSON: That was the job description that I submitted to the Civ. Personnel Office. The new, or proposed job description. We had insufficient justification to warrant upgrading the positions at the Separation Transfer Point. Anything that was omitted or anything that could have been erroneous, the employee was asked in detail, if their job description was correct.

MR ALLEN: Were those job descriptions that you proposed and sent into Civilian Personnel, were they approved in content? Was the description itself?

MR ANDERSON: They were fairly close. I couldn't specifically respond without setting down in detail and going over those. To the best of my knowledge they were fairly close. The positions that we wanted to upgrade we could not get upgraded, so we broke the thing down and we've got separate job descriptions for Ms. Perry, separate job description for the two ladies in Quality Assurance, we have a standardized job description for the people in the In-processing and Write-up Unit and a standardized job description for the people in Breakdown and in our Retirement and Typing Units. Now, what Mr. Cook told me, sir, to have a separate job description for the two people in retirement, I will refer to my notes again: O.K. When Mr. Cook came back down and we finalized the job descriptions and one of them had an error in it, there were two sentences left off, and that's in Ms. Perry's area of responsibility, (we did not discover the administrative error until Mr. Cook had departed) and that was making final disposition of the 201 file and related documents to the appropriate agencies, and the typing of the final separation document with all related forms that accompany. Each supervisor was briefed by Mr. Cook of the CPO in relation to the completion of the position survey. However, Ms. Perry elected not to authenticate the job description for employees in her area of responsibility. She based her action on the fact that the job descriptions should be prepared for the two employees in the Retirement Unit; in other words, the two separate job descriptions. The duties for the employees in her area are similar and quite often require the shifting and cross training of employees to insure that each area of responsibility can be accomplished when employees are absent. To prepare a separate job description for the employees of the Retirement Unit would be cause to down grade four GS-4 positions to GS-3. These positions were identified by CPO, and will be Mr. Fox, Records Breakdown; Ms. Hurdy, and Ms. Jennifer of the typing unit, and the one GS-4 position that we had a vacancy, and my contention was, and I talked to Mr. Cook at length, in the presence of Ms. Perry and SFC James, that I was not so much opposed to having separate job descriptions but I was opposed to the fact that by doing this, it would require these people to be downgraged, and they would have to be shifted to other positions, and it would cause additional workload for the Separation and Transfer Point and would probably slow down the processing of the type of applications that we have. I felt that based on that, and we went ahead and talked to Mr. Cook and we went ahead and consolidated those jobs back there to allow for shifting these people and cross training them, so their jobs would not be downgraded. If these jobs could have been upgraded to a GS-5 we would have been most happy to have had a separate job description. We

would have had a separate job description for our two people out front, Mr. Jeffers and Ms. Smith. All that is on file at the Civ. Personnel Office, and Mr. Cook is in the process now of giving us another job description for those two people back there and adding the two sentences that were omitted.

MR ALLEN: Right up to this moment, do you know if there has been any change made in the official job description in effect for these people, any of them?

MR ANDERSON: Well, what do you mean by official job description? The job descriptions that we received from Mr. Cook, as a result of the audit, are final. The people have been given copies of them, except the people back in the Retirement Unit, the Typing Unit and Mr. Fox, and these were recalled and hopefully within the next few days we will get copies of those. Basically, the only change will be adding the two sentences on there and give us credit for the additional work we do.

MR ALLEN: I can't think of anything further I was to ask you about Ms. Perry's case. Do you have anything to add?

MR ANDERSON: I would love to have promoted Ms. Perry, not on the basis of the fact that she complained, but based on the fact that she does a good job for us. We have failed to provide sufficient data to the Civilian Personnel Office and along with Ms. Perry's personal interview with Mr. Cook.

MR ALLEN: If you have no further comments, this concludes our interview.

APPENDIX D

Naval Postgraduate School

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

In January, Colonel William Cullen, the Adjutant General (AG) at Fort Saxon, met with his deputy, Major Paul Martin, and CW3 Jerry Anderson, to discuss personnel problems in the Separation Transfer Section. Several civilian workers in the Section had complained about the quality of management. Anderson, the head of the Section, said he was convinced that the only problem was that the Section had too many civilians working in it. Sixteen civilian employees and the non-commissioned officer in charge (NCOIC), SFC Thomas James worked within the Section. Civilian personnel regulations kept Anderson from shifting employees from one function to another because of their job descriptions. He told Colonel Cullen that if military personnel replaced half of the civilians, then the organizational continuity and corporate memory of the civilians would be maintained while job flexibility would be gained with the military personnel.

After Anderson departed, Colonel Cullen told Major Martin that Anderson's suggestion only provided a short term solution. He said the problem could be traced to the supply and demand for services. The number of Army personnel being separated from the service at Fort Saxon had declined by one-fourth over the past seven years while the Separation Transfer Section's staff had been reduced by one-half. Nonetheless, the Section had been functioning effectively. All of the Army's separation processing time standards were being met. However, Colonel Cullen told Major Martin that Anderson met the time standards by pressuring the civilian employees which drove them to lodge formal complaints. A pending reduction of two civilian positions in the Section was sure to compound the pressure and increase the complaints.

The Army separation workload at Fort Saxon was forecasted to remain constant for the next few years. If so, and if trends continued, the number of employees authorized for the Section would probably be reduced even further. Colonel Cullen told Major Martin that the only way to relieve the workload pressure and increase efficiency was to automate part of the paperwork processing.

Fort Jackson, S.C. and Fort Dix, N.J. had acquired microprocessor-based word processing (WP) systems that reportedly reduced both the time and costs of processing separation documents.

Cullen directed Anderson to study the WP operations at Jackson and Dix.
CW3 Mike Sweedon, a computer specialist from the Standard Installation
Division Personnel System (SIDPERS) Section, within the Adjutant
General Division, was to assist Anderson in his research.

CW3 Anderson and Sweedon identified four areas that would be
included in their proposal to Colonel Cullen: processing separation docu-
mentation, postal locator services, personnel orders preparation, and
centralized typing. Fort Jackson had already purchased a software package
from Digital Equipment Corporation (DEC) for $60,000 which included all of
these functions except centralized typing. Since Fort Saxon would not
have to absorb any of these developmental costs, Anderson told Sweedon
that additional cost savings would be realized if these areas were included
in the proposal.

The preliminary work indicated that a WP Center would be estab-
lished in Wright Hall which housed most of the AG Sections. DEC was
selected to provide the equipment (EXHIBIT 1) for the separation document-
ation preparation, orders preparation, and postal locator functions because
of Fort Jackson's success with DEC equipment. In addition, the hardware
and software would allow expansion up to 63 simultaneous users. Anderson
contended that the large storage capacity requested was justified in light
of the fact that other staff agencies on Fort Saxon had expressed interest
in tying-in to the Word Processing Center. Dictaphone equipment
(EXHIBIT 2) was selected for the centralized typing function because a
Tenant Command on Fort Saxon, which utilized Dictaphone equipment, received
excellent service from the vendor. Both the DEC and Dictaphone equipment
had an expected economic life of five years. The WP Center would be
staffed with personnel drawn from the various AG Sections. Additional WP
Center start-up costs are shown in EXHIBIT 3.

The AG Division at Fort Saxon already leased a variety of WP
equipment (EXHIBIT 4). Most of this WP hardware would be redundant with
the proposed system. Additionally, a lack of standardization among the
present WP devices prevented operational and storage compatibility with the
proposed system justifying termination of these leases.

The Separation Transfer Function

Under the current system, the Separation Transfer Section prepared
separation documents for 10,500 people each year who were discharged from
the Army via Ft. Saxon. The procedure for processing a routine separation
packet is illustrated in EXHIBIT 5. Under the present system, the average
time to process a separation manually was five days. Five days were needed
because of backlogs and corrections. Under the WP System proposal, two
GS-4, Step one,[1] positions would be eliminated and the processing time would
be reduced to one day. The proposed system would use WP equipment (EXHIBIT
1) for the labor-intensive task of filling out forms. Instead of constantly

[1]Civilian Personnel Pay Rate table is presented in EXHIBIT 6.

reorganizing, reformating, and retyping information; variable data would
be entered only once on a keyboard then displayed on a cathode ray tube
(CRT) terminal. For each separation being processed, the CRT would display
forty questions requiring operator responses. The responses would create a
data file for each person being separated. Once this information was
entered, finished forms would be printed on high speed printers.

The Postal Locator Function

The Adjutant General Division, Postal Locator Section, maintained
a file on 52,000 assigned or recently departed personnel. The file was
utilized by Postal Locator personnel to accomplish mail redirects and handle
address inquiries. Locator information was maintained on DA Form 3955 in
21 visible index stands of 35 panels each. Daily additions of locator cards
required constant shifting of the cards between the panels. All the cards
had to be edited on a monthly basis to remove officially inactive cards.
In order to redirect the mail it had to be sorted into alphabetical sequence
and then broken down into groups that corresponded to one of the 21 file
stands. The mail was then re-addressed by retrieving the correct locator
card and writing the forwarding address on the piece of mail. If the new
system proposal were approved, then Ft. Saxon would not have to purchase 21
visible index stands because a forthcoming edition of DA Form 3955 would be
of a different size. The new stands would cost a total of $8,000.

Under the manual system, locator inquiries could only be handled
during normal duty hours (7:30 through 4:30, Monday through Friday). At
all other times the One-Stop In and Out Processing Section provided locator
information from the SIDPERS data base for the 20,000 currently assigned
people at Ft. Saxon.

Under the proposed system, the 52,000 records would be stored in
the WP system on disk drives providing instant access on the CRT terminals.[2]
The CRT terminal would provide keyboard access to all locator records.
File updates would occur by extracting arrival and departure listings from
the SIDPERS magnetic tapes. The system would automatically purge obsolete
locator records after Army retention requirements had been met. Address
labels for re-directing mail would be provided from the locator data base
on a high speed printer. An additional CRT terminal would be placed in the
One-Stop In and Out Processing Section to handle after duty hour locator
inquiries. Under this proposal, CW3 Anderson and Sweedon estimated that
two enlisted E-4[3] positions from the Postal Locator Section could be
eliminated. Mail re-addressing and locator inquiry times would be reduced
by one-half.

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[2]For postal locator equipment requirements, see EXHIBIT 1.

[3]For Military Pay Chart, see EXHIBIT 7.

Preparation of Military Personnel Orders

Under the current system, 1200 orders per week were processed on IBM magnetic card equipment (EXHIBIT 4) at two locations: Trainee Personnel Section and Administrative Services Section. Information required in the preparation of orders was contained on DA Form 2446, Request for Orders; APPA-AG Form 2017, Assignment Control Card; and other documents. Order Clerks often would have to produce orders quickly, increasing the chance of error. Most errors were made in the standard name line.[4] Amendment orders would then have to be issued to correct erroneous orders.

Under Anderson's and Sweedon's proposal, the SIDPERS assignment instruction file received from Washington would be loaded into the WP system so that those items required for orders preparation would not have to be included on the orders request form. A handwritten orders request form, requiring only essential data, would be forwarded from the Redeployment and Trainee Personnel Sections to the WP Center. The system would be programmed so that the CRT Terminals at the WP Center would lead the operators through a series of interactive questions which would require the operator to enter the items contained on the handwritten order request. The system would pull the order format from disk file, format the keyed information, and print out a military order.

Anderson and Sweedon estimated that the proposal would reduce paper costs $10,000 on an annual basis, eliminate two enlisted E-4 order clerks at Trainee Personnel Section, and two enlisted E-3 positions at the Redeployment Section.

The Centralized Typing Function

Under the current system, each of the ten AG Sections had their own secretaries in addition to other clerks who did routine typing. All Section typing requirements were performed on site.

Under the proposed system, users would each have a detailed manual for document origination. A document originator would choose a specific correspondence format and then telephonically call-in variable input following the users manual. This information would be processed through the computer's Master Mind Basic Unit and recorded on a Thought Tank Machine (EXHIBIT 2). The typist would then retrieve this information and using a ear phone Transcription Terminal, type the data on a Word Processing Station[5] (EXHIBIT 1). Output would be provided on the Report Printer (EXHIBIT 2) or Letter Quantity Printer (EXHIBIT 1).

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[4]The Army standard name line consists of name, grade, SSN, unit identification code, and unit of assignment.

[5]The Word Processing Station consists of a CRT, keyboard and limited storage device which connects to the Shared Logic Word Processor and Master Mind Basic Unit.

WP Survey

In order to meet Army requirements for a WP system request, CW3 Anderson and Sweedon conducted a typing survey.[6] The intent of this survey (EXHIBIT 8) was to determine the number of personnel who would be required to run the WP System (EXHIBIT 9). In addition to the personnel reductions previously discussed, they identified one enlisted E-3 position from the Personnel Actions Section for elimination, and one enlisted E-4 position from the Personnel Management Section. In addition, overtime costs would be reduced by $4,000 on an annual basis.

Summary

Anderson told Sweedon that the system that they were about to propose to Colonel Cullen would: (1) improve overall operations because of faster access to files, (2) provide improved output control, (3) add the capability to compile recurring statistical reports, and (4) reduce costs. Anderson and Sweedon agreed that the orders preparation, postal locator, and personnel transfer functions would be easy to sell to Colonel Cullen because these functions were already automated at Ft. Jackson. They did not know how the centralized typing function and associated Dictaphone equipment would be received.

Assignment: Evaluate the potential savings of the WP System. Most DOD capital investment decisions require the use of a 10% discount rate.

Comment on the efficiency and effectiveness of the proposed system and hardware and software requirements.

Comment on the WP workload and personnel projection surveys.

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[6]Army Regulation 340-8 requires a word processing typing survey to be performed prior to submission to the Adjutant General Center (TAGCEN) for consideration.

EXHIBIT 1

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Digital Equipment Corporation Equipment

Description	Quantity and Location	Annual Maintenance	Annual Lease Payment	Total Purchase Price
Shared Logic[*1] Word Processor	1 WP Center	7,548.00	46,207.32	108,517.05
67MP Disk Drives	1 WP Center	1,680.00	7,524.00	17,670.00
Multiplexer	1 WP Center	552.00	1,524.60	3,580.50
CRT Terminal w/keyboard	3 WP Center 4 Sep. Transfer 2 Postal Locator 2 Trainee Personnel 1 One-Stop Processing	2,448.00	10,454.40	24,552.00
Remote Communication Cable	10	-0-	522.72	1,227.60
100' Communication Cable	5	-0-	237.60	558.00
High Speed Printer	2 Sep. Transfer 1 Postal Locator	1,980.00	4,478.76	9,402.30
Medium Speed Printer	2 WP Center	2,640.00	2,985.84	7,012.20
Letter Quality Printer	4 WP Center	2,256.00	6,328.32	14,861.40
Word Processing Station	4 WP Center	5,040.00	16,624.32	39,041.40
Sorter RSTS	1 WP Center	-0-	146.52	344.10
Datatrieve 9 Track Tape	1 WP Center	-0-	1,782.00	4,185.00
Document Transmission Option	1 WP Center	-0-	990.00	2,325.00
TOTALS		$24,114.00	$99,806.40	$233,276.55

[*1] Includes processor, 256 KB Memory, Cabinet, expansion box, bookplane, 67 MB disk and controller, magtape drive and controller, 16 line multiplexer, Operating System Software.

EXHIBIT 2

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Dictaphone Equipment

Description	Quantity[1]	Annual Lease Payment[2]	Total Purchase Price
Thought Tank Machines	3	2,489.76	5,850.00
Transcription Terminals	5	703.20	1,625.00
Phone In Adapter	1	164.40	395.00
ADM with DCK Interface	3	1,085.40	2,550.00
Cabinet	1	193.80	450.00
Dictameter Panels	3	360.00	825.00
Blank Meter Panels	1	3.84	10.00
Secretarial Panels	5	227.40	500.00
Blank Secretarial Panels	3	11.40	30.00
EGM Panel	1	140.64	320.00
Auto. Transfer Panel	1	81.00	175.00
Auto. Throughput Director Panel	1	76.08	175.00
Transcription Priority	3	107.64	225.00
Phone In Adapter Director Panel	1	28.92	75.00
Standard Cassette Trans. Unit	1	249.48	589.00
Master Mind Basic Unit	1	4,191.24	9,995.00
Report Printer	1	420.24	995.00
193 Modification	3	57.96	150.00
TDM/DDM Modification	3	115.92	300.00
Printer Paper	1	19.32	50.00
Mini Diskettes	1	25.08	65.00
Mini Diskettes Archive	1	25.08	65.00
		$10,777.92	$25,414.00

[1] All dictaphone equipment would be utilized in the WP Center.

[2] Dictaphone equipment lease includes maintenance. If purchased, annual maintenance fee would be $1,206 annually.

EXHIBIT 3

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Additional WP Center Start-Up Costs[1]

Facility Modification	$26,000
Telephone Installation	9,600
Office Furniture	21,538

[1]These expenses would be paid for in a single payment
out of the Adjutant General Division's operating
budget.

EXHIBIT 4

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Present System WP Equipment

Manufacturers Model Number	Serial Number	Owned or Leased[1,2]	Monthly Rental Cost	Proposed Distribution
AB Dick Magna I - Model 2700	629505	Leased	299.90	Return to Vendor
AB Dick Magna I - Model 2700	835056	Leased	478.90	Return to Vendor
IBM Mag Card I - Model 6610	9669402	Leased	164.90	Return to Vendor
IBM Mag Card I - Model 6610	9669396	Leased	164.90	Return to Vendor
IBM Mag Card II - Model 6616	0019347	Leased	266.75	Return to Vendor
IBM Mag Card I - Model 6610	9646326	Leased	164.90	Return to Vendor
IBM Mag Tape IV - Model 1021	085008	Leased	205.00	Return to Vendor
IBM Mag Tape II - Model 1011	106215	Leased	205.00	Return to Vendor
IBM Mag Tape II - Model 1011	096739	Leased	205.00	Return to Vendor

Manufacturers Model Number	Serial Number	Owned or Leased	Monthly Rental Cost	Proposed Distribution
IBM Mag Tape II - Model 1011	0104532	Leased	205.00	Return to Vendor
IBM Mag Tape II - Model 1011	4694653	Leased	205.00	Return to Vendor
IBM Mag Tape IV - Model 1021	0110576	Owned	56.26 (monthly maintenance)	Transfer to another post activity
IBM Mag Tape IV - Model 1021	0083128	Owned	56.26 (monthly maintenance)	Transfer to another post activity
IBM Card Reader - Model 1056	10379	Leased	96.00	Return to Vendor
IBM Card Reader - Model 1056	10940	Leased	96.00	Return to Vendor
IBM Card Reader - Model 1056	15936	Leased	96.00	Return to Vendor
IBM Card Reader - Model 1056	12613	Leased	96.00	Return to Vendor
4 each Junction Box		Leased*	@57.00 each	Return to Vendor

Monthly Lease   3289.77 x 12 = 39,477.24

[1]Maintenance Cost is included in the rental charge.

[2]Equipment had renewable option at current rental price.

EXHIBIT 5

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Separation Procedure

Records In-Processing Unit

1) Receives and screens person-
   nel and finance records for required
   documentation and accuracy.
2) Initials DA FORM 4188-R
3) Submits request for separation orders
4) Forwards finance record to Finance
   Section (DA FORM 2446)
5) Forwards personnel record and allied
   documents to write up unit.

Write-Up Unit

1) Prepares DD FORM 214 WS

Administrative/Quality Assurance Unit

1) Reviews DD FORM 214 WS against
   personnel records for accuracy
2) Submits SIDPERS transaction on
   DA FORM 3813
3) Forwards personnel record and
   allied documents to typing unit.

Typing Unit

1) Prepares the following documents
   A) DD FORM 214   E) DD FORM 256A
   B) DD FORM 473   F) DA FORM 1811
   C) DA FORM 664   G) DA FORM 3082-R
   D) DD FORM 1407 H) APPS-PA FORM 3905

Administrative Quality Assurance Unit

1) Reviews all documents prepared by the
   typing unit for accuracy.

Chief Separation Transfer Section

1) Reviews and signs all separation
   documents.

Administrative Quality Assurance Unit

1) Checks each file for required documen-
   tation prior to orientation briefing.

NCOIC Separation Transfer Section

1) Conducts separation orientation.
2) Insures individuals sign all required
   documents.

Records Breakdown Unit

1) Forwards Health, Dental, and personnel
   records to appropriate government agency
2) Insures all required documentation is
   placed in the record.

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EXHIBIT 6

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Standard Civilian Rate Table[1]

[STEP]	1	2	3	4	5	6	7	8	9	10
GS-1 Annual	7210	7450	7690	7930	8170	8410	8630	8890	8902	9126
GS-2	8128	8399	8670	8902	9002	9267	9532	9797	10062	10327
GS-3	8952	9250	9548	9846	10144	10442	10740	11038	11336	11634
GS-4	10049	10384	10719	11054	11389	11724	12059	12394	12729	13064
GS-5	11243	11618	11993	12368	12743	13118	13493	13868	14243	14618
GS-6	12531	12949	13367	13785	14203	14621	15039	15457	15875	16293

[1]Does not include fringe benefits which constitute
an average additional cost of 9%.

EXHIBIT 7

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Composite Standard Military Rate Table[1]

E-9	23,612		0-6	43,494
E-8	20,260		0-5	35,543
E-7	17,304		0-4	29,489
E-6	14,562		0-3	24,161
E-5	12,279		0-2	18,591
E-4	10,443		0-1	13,777
E-3	9,300		CW-4	27,959
E-2	8,435		CW-3	22,495
E-1	7,499		CW-2	19,447
			CW-1	16,510

[1]Includes cost of fringe benefits.

EXHIBIT 8

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Workload Summary

A. DOCUMENT LENGTH ANALYSIS

SECTION	1-3 PAGES	4-15 PAGES	15 PAGES	TOTAL	EXTENSION
MILITARY PERSONNEL BRANCH					
Personnel Pay Section	1923.5			1923.5	
Separations	536.5	-	-	536.5	
DFR/OCS	613.5	-	-	613.5	
Check Control	1179	-	-	1179	
Casualty	1348	-	-	1348	
Officer Actions	3774	-	-	3774	
Retirements	350	-	-	350	
GCM	1685.5	-	-	1685.5	
Awards	11410	-	-	11410	11,410
Redeployment Section					
Student Officer Management	464.5	-	-	464.5	
Port Call	5609.5	-	-	5609.5	
Overseas Assignments	1160.5	-	-	1160.5	
	7234.5	-	-	7234.5	7,234.5
Personnel Management					
Assignments	325	-	-	325	
OER/EER	8272.5	-	-	8272.5	
Reclassification	1330.5	-	-	1330.5	
	9938	-	-	9938	9,938

A. DOCUMENT LENGTH ANALYSIS (Cont'd)

SECTION	1-3 PAGES	4-15 PAGES	15 PAGES	TOTAL	EXTENSION
Records					
Records Administration	320	-	-	320	
Officer Records	106	-	-	106	
Student Officer Records	408	-	-	408	
Records Bay, Room #200	1636	-	-	1636	
	2469.5	-	-	2469.5	2,469.5
MILPO Miscellaneous Sections					
Congressionals	1566.5	-	-	1566.5	
MILPO Chief	1536.5	-	-	1536.5	
ID Cards	10508	-	-	10508	
SIDPERS	366.5	-	-	366.5	
MILPO Operations	658	-	-	658	
Office of Adj Gen	227.5	-	-	227.5	
AG Orders Section	23157.5	-	-	23157.5	
AG Typing & Editing	7150.5	-	-	7150.5	
Reenlistment Office	1577.5	-	-	1577.5	
	46748.5	-	-	46748.5	46,748.5
Separation Transfer Point & One Stop Processing					
STP Typing	10719	-	-	10719	
STP Breakdown	7348	-	-	7348	
Assignments	1596	-	-	1596	
Quality Assurance	2075.5	-	-	2075.5	
	21738.5	-	-	21738.5	21,738.5

A. DOCUMENT LENGTH ANALYSIS (Cont'd)

SECTION	1-3 PAGES	4-15 PAGES	15 PAGES	TOTAL	EXTENSION
TRAINING ACTIVITIES PERSONNEL BRANCH					
Personnel Management	360.5	-	-	360.5	
Personnel Actions	1812.5	-	-	1812.5	
Administration	2564	-	-	2564	
Orders	10410.5	-	-	10410.5	
	15147.5	-	-	15147.5	15,147.5

B. WORK INPUT ANALYSIS

SECTION	LONGHAND	COMPOSED BY TYPIST	COPY TYPE	PRE-RECORDED	TOTAL	EXTENSION
MILITARY PERSONNEL BRANCH						
Personnel Action Section						
Separations	369	30.5	1524	-	1923.5	
DFR/OCS	15	102.5	419	-	536.5	
Check Control	198.5	-	415	-	613.5	
Casualty	329.5	168	681.5	-	1179	
Officer Actions	24	219	1105	-	1348	
Retirements	205.5	739.5	2829	-	3774	
GCM	-	184	246	-	350	
Awards	527	90	1068.5	-	1685.5	
	1668.5	1453.5	8288	-	11410	

B. WORK INPUT ANALYSIS (Cont'd)

SECTION	LONGHAND	COMPOSED BY TYPIST	COPY TYPE	PRE-RECORDED	TOTAL	EXTENSION
Redeployment Section						
Student Officer Management	9	165	290	-	464.5	
Port Call	74	1550	3985.5	-	5609.5	
Overseas Assignment	468.5	265.5	426.5	-	1160.5	
	551.5	1980.5	4702.5	-	7234.5	7,234.5
Personnel Management						
Assignments	16	68.5	250.5	-	335	
OER/EER	-	2200.5	6072	-	8272.5	
Reclassification	-	452.5	878	-	1330.5	
	16	2721.5	7200.5	-	9938	9,938
Records						
Records Administration	230	3.5	86.5	-	320	
Officer Records	43	-	63	-	106	
Student Officer Records	64	5	338.5	-	407.5	
Records Bay, Room #200	466	29.5	1140.5	-	1636	
	803	38	1628.5	-	2469.5	2,469.5
MILPO Miscellaneous Sections						
Congressionals	734	76	-	756.5	1566.5	
MILPO Chief	133.5	-	391	1012	1536.5	
ID Cards	57.5	2143.5	8307	-	10508	
SIDPERS	118.5	67.5	180.5	-	366.5	
MILPO Operations	139	120.5	398.5	-	658	
Office of Adj Gen	171	12.5	44	-	227.5	
AG Orders	1298	5561.5	8300	7998	23157.5	
AG Typing & Editing	368	710.5	2055	4017	7150.5	
Reenlistment	385	-	1007	185.5	1577.5	
	3404.5	8692	20683	13969	46748.5	46,748.5

B. WORK INPUT ANALYSIS (Cont'd)

SECTION	LONGHAND	CONPOSED BY TYPIST	COPY TYPE	PRE-RECORDED	TOTAL	EXTENSION
Separation Transfer Point & One Stop Operation						
STP Typing	5747.5	36	4935.5	-	10719	
STP Breakdown	-	2020	5328	-	7348	
Assignments	435	-	1161	-	1596	
Quality Assurance	207.5	-	1868	-	2075.5	
	6390	2056	13292.5	-	21738.5	21,738.5
TRAINING ACTIVITIES PERSONNEL BRANCH						
Personnel Management	106	53.5	201	-	360.5	
Personnel Actions	391.5	145.5	1275.5		1812.5	
Administration	1751		813		2564	
Orders	2732.5	-	1559	5744	10410.5	
	4981	199	3848.5	5744	15147.5	15,147.5
						114,686.5

C. WORK OUTPUT ANALYSIS

SECTION	ORIGINAL TYPING	REVISION TYPING	REPETITIVE TYPING	TOTAL	EXTENSION
MILITARY PERSONNEL BRANCH					
Personnel Action Section					
Separations	369	30.5	1524	1923.5	
DRF/OCS	117	-	419	536.5	
Check Control	198.5	-	415	613.5	
Casualty	329.5	168	681.5	1179	
Officer Actions	243	-	1105	1348	

C. WORK OUTPUT ANALYSIS (Cont'd)

SECTION	ORIGINAL TYPING	REVISION TYPING	REPETITIVE TYPING	TOTAL	EXTENSION
MILITARY PERSONNEL BRANCH					
Retirements	945	-	2829	3774	
GCM	104	-	246	350	
Awards	527	90	1068.5	1685.5	
	2833.5	288.5	8288	11410	11,410
Redeployment Section					
Student Management	174	-	290.5	464.5	
Port Call	1624	-	3985.5	5609.5	
Overseas Assignment	733.5	-	427	1160.5	
	2531.5	-	4703	7234.5	7,234.5
Personnel Management Section					
Assignments	84.5	-	250.5	335	
OER/EER	2200.5	-	6072	8272.5	
Reclassification	-	452.5	878	1330.5	
	2285	452.5	7200.5	9938	
Records					
Records Administration	230	3.5	86.5	320	
Officers Records	43	-	63	106	
Student Officer Records	64	5	338.5	407.5	
Records Bay, Room #200	466	29.5	1140.5	1636	
	803	38	1628.5	2469.5	2,469.5

C. WORK OUTPUT ANALYSIS (Cont'd)

SECTION	ORIGINAL TYPING	REVISION TYPING	REPETITIVE TYPING	TOTAL	EXTENSION
MILPO Miscellaneous Sections					
Congressionals	741.5	68.5	756.5	1566.5	
MILPO Chief	111	35	1390.5	1536.5	
ID Cards	2203.5	-	8304.5	10508	
SIDPERS	221.5	10	130	366.5	
MILPO Operations	218.5	43.5	396	658	
Office of Adj Gen	183.5	-	44	227.5	
AG Orders	6855.5	5	16297	23157.5	
AG Typing & Editing	1024	113	6013.5	7150.5	
Reenlistment	385	-	1192.5	1577.5	
	11948.5	275.5	34524.5	46748.5	46,748.5
Separation Transfer Point & One Stop Processing					
STP Typing	5783.5	-	4935.5	10719	
STP Breakdown	2020	-	5328	7348	
Assignments	435	-	1161	1596	
Quality Assurance	207.5	-	1868	2075.5	
	8466		13292.5	21738.5	21,738.5
TRAINING ACTIVITIES PERSONNEL BRANCH					
Personnel Management	159.5		201	360.5	
Personnel Actions	391.5	145.5	1275.5	1812.5	
Administration	1751	-	813	2564	
Orders	2732.5	-	7678	10410.5	
	5034	145.5	9967.5	15147.5	15,147.5
					114,686.5

EXHIBIT 9

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

<u>Word Processing Personnel Projection</u>

SECTION Type of Work Performed	Average Weekly Lines	÷	Production[1] Factor	X	Factor for Absences	=	Projected Personnel
MILITARY PERSONNEL BRANCH							
Personnel Actions							
Original Typing	2833.5	÷	3500	X	1.11	=	.90
Revision Typing	288.5	÷	7000	X	1.11	=	.05
Repetitive Typing	8288	÷	10000	X	1.11	=	.92
							1.87
Redeployment							
Original Typing	2531.5	÷	3500	X	1.11	=	.80
Revision Typing	0	÷	7000	X	1.11	=	.00
Repetitive Typing	4703	÷	10000	X	1.11	=	.52
							1.32
Personnel Management							
Original Typing	2285	÷	3500	X	1.11	=	.72
Revision Typing	452.5	÷	7000	X	1.11	=	.07
Repetitive Typing	7200.5	÷	10000	X	1.11	=	.80
							1.59
Records							
Original Typing	803	÷	3500	X	1.11	=	.25
Revision Typing	38	÷	7000	X	1.11	=	.01
Repetitive Typing	1628.5	÷	10000	X	1.11	=	.18
							.44
MILPO Miscellaneous							
Original Typing	11948.5	÷	3500	X	1.11	=	3.79
Revision Typing	275.5	÷	7000	X	1.11	=	.44
Repetitive Typing	34524.5	÷	10000	X	1.11	=	3.83
							8.06

SECTION Type of Work Performed	Average Weekly Lines	÷	Production Factor	X	Factor for Absences	=	Projected Personnel
SEPARATION TRANSFER POINT AND ONE STOP PROCESSING							
Original Typing	8446	÷	3500	X	1.11	=	2.68
Revision Typing	0	÷	7000	X	1.11	=	0
Repetitive Typing	13292.5	÷	10000	X	1.11	=	1.48
							4.16
TRAINEE ACTIVITY PERSONNEL BRANCH							
Original Typing	5034.5	÷	3500	X	1.11	=	1.60
Revision Typing	145.5	÷	7000	X	1.11	=	.02
Repetitive Typing	9967.5	÷	10000	X	1.11	=	1.11
							2.73
GRAND TOTAL							
Original Typing	33882	÷	3500	X	1.11	=	10.75
Revision Typing	1200	÷	7000	X	1.11	=	.19
Repetitive Typing	79604.5	÷	10000	X	1.11	=	8.84
	114686.5						19.78

TOTAL NUMBER WORD PROCESSING PERSONNEL REQUIRED PER WEEK   20

[1] Production Factors are contained in AR340-8.

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